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The sales have been uniformly progressive and profitable, and the returns prompt.

During recent years advertisements have been extended and have elicited such a response that the Quinine Bitters have become increasingly popular; and the object of the Vendor in converting the business into a Joint Stock Company is, by the use of additional capital, to so spread the demand for the preparation as to make it one of the leading investments of the day. *The Vendor shows his confidence in such a result by taking his own Shares as Deferred.*

The Company acquires the ownership of the preparation with its goodwill, stock, stamps, current advertisements and some subsidiary valuable preparations known as the Digestive Pearls, Iorwerth Worm Lozenges and Riamy's Golden Balm for the Hair, for all of which there is a steady and profitable demand, together with the lease of the laboratory and warehouse at Llanelli held for about 45 years unexpired, also the offices in Stepney Street at a low rent, the furniture and the plant, fixtures, and laboratory fittings.

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3 LOTHBURY, LONDON, E.C., 10th July, 1888.

GWILYM EVANS, Esq.

DEAR SIR,—

We beg to report to you that we have examined the Books and Accounts of your Patent Medicine Business for the past two-and-a-half years, and we hereby certify that after reserving a fair and reasonable portion of the advertising expenses as unexhausted, the *net profits* have been at the rate of £2 537 per annum.

We further report that we have examined the Sales of the Business for the past six-and-a-half years, and that these have shown a most progressive rate of increase year by year, and also more particularly since 1st January, 1886. We have confidence thereby stating that the business is thoroughly sound, and that with additional capital both the Home and Foreign Trade could be largely developed and made more productive.

Yours faithfully, R. MACKAY & CO.

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The sale will take effect as from and after the 31st day of March, 1888, and as from that date all the usual business of the Vendor will be taken over as having been transacted by the Vendor as the Agent of the Company and for its benefit. None but the usual trade transactions and advertising have been carried on since that date, and all moneys accruing due from the American Agencies, amounting to £1,385, are to be included in the purchase. The sales for the past three months exceed by 40 per cent. the sales for the corresponding period of last year.

No promotion money has been or will be paid, and the Vendor pays all legal, Agency, and other expenses in connection with the formation of the Company up to the allotment of Shares.

Mr. GWILYM EVANS will devote his attention to the business in the future with the same judgment and enterprise as in the past. His experience in advertising, both at home and abroad, specially qualifies him for the post of Managing Director; but he will accept no remuneration for his services for three years, after which he will accept such amount for future services as the Company in General Meeting shall determine.

The only contract entered into beyond the ordinary *bona-fide* trade agreements connected with the current trading is the purchase agreement dated the 9th day of July, 1888, and made between GWILYM EVANS, the Vendor, of the one part, and THE QUININE BITTERS MANUFACTURING COMPANY, LIMITED, of the other part. Prospectuses can be obtained on application at the Registered Offices of the Company, or at the London and Provincial Bank, Limited, and its Branches, and at the offices of the Solicitors of the Company, where also copies of the agreement can be seen. Applications for Shares should be made on a recognised Form to the Bankers, the Branches, or to any of the Directors.

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CONTENTS OF No. 5, VOL. 3. MAY 1, 1888.

Editorial Articles:—"The Pharmacy Board of New South Wales," "Pharmaceutical Society of New South Wales," "A School of Pharmacy for Queensland," "The Australasian Association," "The Dental Act, Victoria."

COLONIAL REPORTS.

New South Wales.—Pharmacy Board Official Report.

New Zealand.—Pharmacy Board of New Zealand and the Midland Pharmaceutical Association of New Zealand Official Reports.

Queensland.—Pharmaceutical Society: Report of Meeting.

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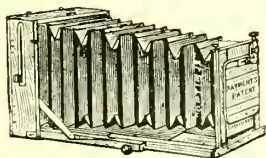
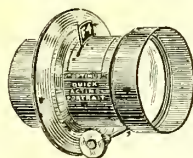
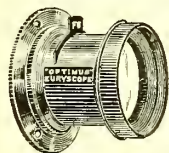
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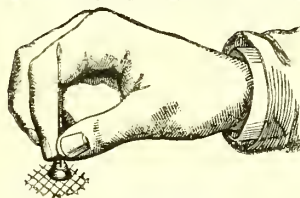
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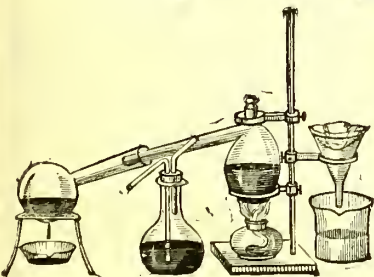
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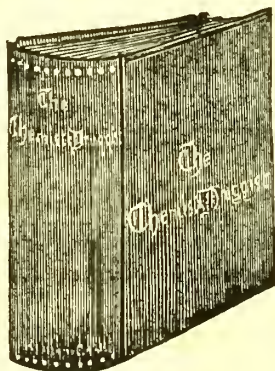
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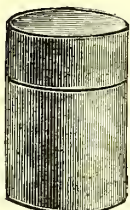
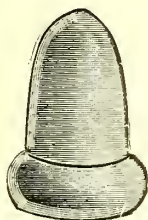
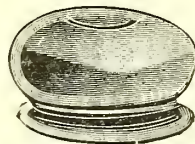
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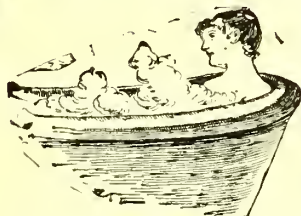
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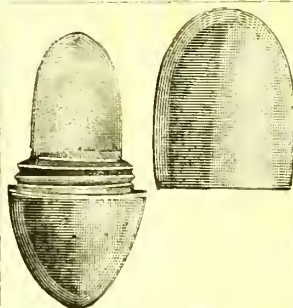
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Wanted, the following forceps:—Molar, upper left; bicuspsids, upper; molar, lower; temporary stump, lower; incisors, lower; wisdom, upper; wisdom, lower. Price, &c., to Dee, 63 London Street, Fitzroy Square, W.

Nest of well made mahogany drawers in good condition, glass labels and knobs, 18 or 20 feet long; pink ointment jars; recess labels, 3 or 4 lb. size; check rotary cash-till; platform scales to weigh to 7 lbs.; sponge cases, &c.; re-fitting shop; also ship's medicine-chest, second-hand, for 30 men. W., care of Evans, Sons & Co., Liverpool.

Address Wanted.

George Wamford at one time with Kellott, Wigan. (Friendly matters.) 260/17.

BEECHAM'S PILLS

CAUTION.

THE PUBLIC ARE HEREBY INFORMED that by an order made by Mr. Justice Stirling on the 16th day of June, 1888, in an action in the High Court of Justice (Chancery Division), Beecham v. Pritchard, the Defendant was perpetually restrained from infringing the Plaintiff's Trade Mark, and from printing, writing, or marking on or affixing to, or causing or permitting to be printed, written, or marked on, or affixed to, any show or other cards, or labels, or pill boxes, the words "BEECHAM'S PILLS," or any mark calculated or contrived so as to lead to the belief that the Pills sold by the Defendant are the Plaintiff's Pills.

PROCEEDINGS WILL BE TAKEN against any person selling Pills as "BEECHAM'S PILLS" other than those manufactured and supplied by the Plaintiff, Thomas Beecham, of St. Helens, Lancashire, the Proprietor of "BEECHAM'S PILLS."

OPPENHEIM & MALKIN,

61 Lord Street, Liverpool,

June, 1888.

Solicitors for the said Thomas Beecham.

THE BEST NATURAL APERIENT.

Persistent attempts are made by interested parties to deceive the public by offering Natural Mineral Aperient Waters with marks, names, and designations very similar to those which are used by the **APOLLINARIS COMPANY (LIMITED)** upon the **NATURAL MINERAL APERIENT WATERS** imported by them.

Under these circumstances the **APOLLINARIS COMPANY (LIMITED)** feel compelled to caution the public that the **HUNGARIAN BITTER WATER** sold by the **COMPANY** always bears the name of the **APOLLINARIS COMPANY (LIMITED)** on the Label, and a **RED DIAMOND**, which is their **TRADE MARK** of Selection.

DEMAND THE DIAMOND MARK,

and insist upon receiving the **HUNGARIAN APERIENT WATER** of the **APOLLINARIS COMPANY (LIMITED)**.

146 MINORIES LONDON E.C. New York Sydney

SODA WATER MACHINERY

AND ALL ACCESSORIES FOR THE TRADE

BRATBY & HINCHLIFFE

HEAD OFFICE SANDFORD ST. ANCOATS, MANCHESTER.

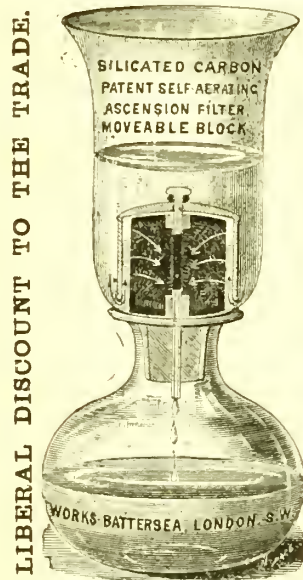
BOXES BOTTLES. MACHINERY. ESSENCES. Catalogues, Circulars, Testimonials Post free

SO COMMON IN FILTERED WATER,

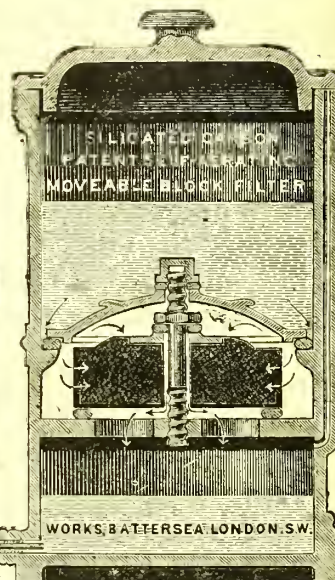
OBVIATED BY USING SILICATED CARBON FILTERS AERATED

By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable.

The Silicated Carbon Block can be Instantly Removed, leaving the whole of the Filter Open for Inspection and Cleansing.



Glass Table Filters.



Domestic Filters.

FOR PRICES AND FULL PARTICULARS, WRITE TO THE
SILICATED CARBON FILTER CO., BATTERSEA, LONDON, S.W.

See INDEX TO ADVERTISEMENTS, pp. 25-27.

THE "LONDON-MADE" SYPHON BOTTLE

(TITLE REGISTERED).

Obtained the HIGHEST AWARD at the International Health Exhibition, London, 1884.



The high reputation this bottle has achieved is due to the fact of its being in every particular the most perfect yet introduced; and when compared with others in the market it stands pre-eminent. It is most simple in its working parts, therefore the least liable to get out of order; it is the most easily opened, the lightest pressure on the handle being sufficient; it produces a more highly-charged gaseous water than is usually obtained from siphons; it compares most favourably in appearance with any, and the metal top being entirely free from lead, the prejudice against siphon drinks is at once removed, as the liquid passes over pure tin only.

All our Syphons are now fitted at the base with a groove, so that drips from the spout that run down the sides are prevented from soiling the table. See drawing.

NOTE.—Syphons made with our patent foot for collecting excess of liquid dripping from the spout after use are supplied at no extra charge, and will be found of great utility in preventing stains, &c., upon table linen. This is a desideratum long been wanting, particularly for private-house use. Send for sample; forwarded upon receipt of 2s.

Any name, crest, or trade-mark put on the glass by an improved acid process, at from 1s. to 2s. per gross. There is a three-fold advantage in this, as it forms a continual advertisement, is a great ornament, and a preventive of fraud. The plate for engraving costs extra from 5s. upwards, according to the artistic device required.

PRICES (WHITE, BLUE, GREEN, OR AMBER):—

	By the gross,	Less than 1 gross.
	per doz.	per doz.
Quart size	£1 2 0	£1 4 0
Pint size	1 1 0	1 3 0
Half-pint, Pear shape	1 0 0	1 2 0
Octagonal vases, any colour (including Azure Blue) ...	1 4 0	1 8 0

Tops, nickel-plated, from 5s. 6d. per doz. extra. Tops, silver-plated andurnished, from 9s. per doz. extra. A charge is made for packing, except when ordered in our patent bin cases (holding one dozen each, price 2s. 6d. each).

Please Note.—B. & F. are the only firm manufacturing Syphons in England that do not supply them filled, and so compete with their customers' trade.

BARNETT & FOSTER, MINERAL WATER ENGINEERS,

Manufacturing Chemists, and General Providers for the Aërated Water Wine, Beer, and Cyder Trades,

"Niagara Works," 26th Eagle Wharf Road, London, N.

Send for Price List of Soda-water

Machinery and Accessories.

TYRER'S SAUCES

6000
VALUE

"BOROUGH" KETCHUP

THE GIANT 1d. BOTTLE OF SAUCE.
LARGEST IN THE TRADE.

In Half-Gross Boxes, at 6/6 per Gross.*

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE,
OR READING SAUCE.

1d. Sample Bottles, dozen parcels	..	per gross	5/	extra quality	6/
1d. Giant Bottles, dozen parcels	..	"	5 6	"	6 6
1d. Giant Bottles, dozen parcels	..	"	6	"	8
1d. Giant Bottles, dozen parcels	..	"	6 6*	"	8
1d. Bottles (flat or round), reputed 1-pint	..	"	16	"	24
1d. Bottles (flat or round), reputed pint	..	"	26	"	32
1d. Imperial Round Stoppered Bottles	..	"	30	"	36
1-pint Imperial	..	"	50	"	60
12½-gallon Casks (casks free) ..	..	each	20	"	32

ROYAL CAFÉ SAUCE.

In 8 oz. square-stoppered bottles, 48/ per gross.

A rich, fruity Sauce of fine flavour, and worth especial attention, as being the most saleable in the market.

Samples of any kind Sent Free of all Cost by

PETER TYRER,
The "Borough" Ketchup and Sauce Maker,
70 LONG LANE, BOROUGH, LONDON, S.E.

SCOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.
Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.
BURGOYNE & CO., 16 Coleman Street, London, E.C.
JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.

TEMPERANCE BEVERAGES.

A Sixpenny Bottle of

ADAMS'S EXTRACT OF HERBS

Will make 8 gallons of sparkling, wholesome, and refreshing

PRIME HERB OR BOTANIC BEER.

Unequalled in strength and richness of flavour by any preparation made from fresh herbs.

The Extract is very carefully manufactured, on the most improved scientific principles, from the herbs and plants gathered and dried at the proper season, when their virtues are in full vigour, thus retaining their invigorating and health-giving properties.

It makes an excellent beverage, giving natural flavour and colour, and a sparkling foam like bottled ale.

In Bottles, 6d. to make 8 gals.; 1s. to make 18 gals.; and
2s. 6d. to make 50 gals.

ADAMS'S GINGER ALE ESSENCE

makes a sparkling, refreshing, and invigorating beverage for summer and winter.

ADAMS'S SPARKLING FOAM PRODUCER.

One tablespoonful added to 2 gallons of the Herb Beer or Ginger Ale, just before bottling, gives a creamy foam like bottled ale.

Wholesale Agents,

W. ELWARDS & SONS, Queen Victoria St., London.

Specially favourable terms to large Buyers from the

PROPRIETOR,

B. ADAMS, Mansfield, Notts.

TO THE
CHEMISTS & DRUGGISTS
OF
GREAT BRITAIN.

LEGRAPHIC ADDRESS: *St. George's, Middle St.,*
COLEMAN, *NORWICH,*
GEORGE'S, NORWICH. *December, 1887.*

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.
Trade prices on application.*

P.S.—Where the Licence is not held we are willing to pay the entire cost of a Retail Licence (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over one thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

COLEMAN & CO., LIMITED,
ST. GEORGE'S, NORWICH,
AND 3 NEW LONDON STREET, LONDON, E.C.
18

EVANS'
OL. RICINI
SINE SAPORE.
(TASTELESS.)

This Castor Oil is *expressly and solely* manufactured for us. It is produced by a process which removes the taste, though not the efficacious properties.

In W. Qts., tins, or bottles with special label.

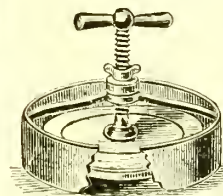
Prices and samples on application. [3]

Small samples for distribution to Medical Men and others supplied gratis.

LONDON— **LIVERPOOL—**
EVANS, LESCHER & WEBB. **EVANS, SONS & CO.**
Manchester, Birmingham, Paris, Sydney, Montreal,
Toronto, and Victoria, British Columbia.

BRACHER'S "DESIDERATUM"
ADJUSTABLE
PILL FINISHER

(DELF'S PATENT).



PRICE 6 6 EACH.

"DESIDERATUM"
(TRADE MARK)
ON EVERY MACHINE.

For Descriptive Price Lists and Testimonials apply to

BRACHER & CO.

Inventors and Patentees,

WESTHILL, WINCANTON.

SHOWROOMS { London—100 Houndsditch. Manchester—24 Corpora-
tion Street. Wolverhampton—2 Cleveland Street.

HOLLOWAY'S PILLS & OINTMENT

Have the Largest Sale of any Medicine in the World.

MANUFACTURED ONLY AT

Professor HOLLOWAY'S Establishment,

78 New Oxford St. (late 533 Oxford St.), London,

And sold at 1s. 1½d., 2s. 9d., 4s. 6d., 11s., 22s., and 33s. each Box or Pot

Chemists and Druggists selling "Holloway's Pills and Ointment" can on application to the above address, or to the Wholesale House with whom they deal, be supplied free of charge with Handbills and Posters with their name and address printed at foot.

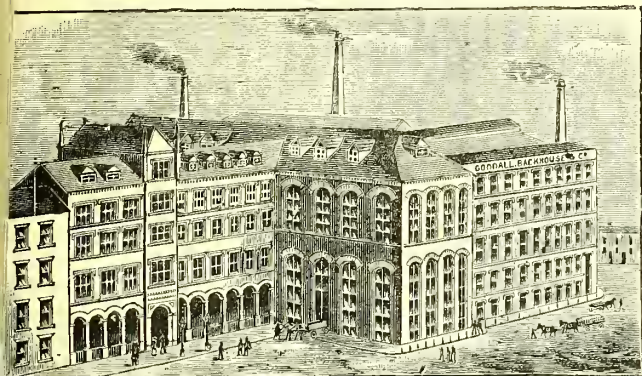
Wholesale Terms see List of "Proprietary Articles" in most Price Currents.

SEE INDEX, PAGES 25—27.

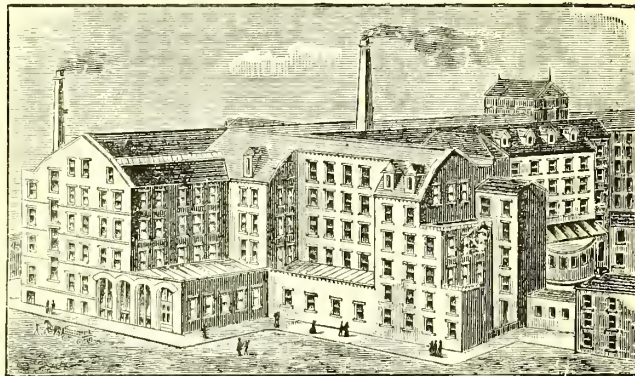
GOODALL, BACKHOUSE & CO.'S

PREMISES AT LEEDS,

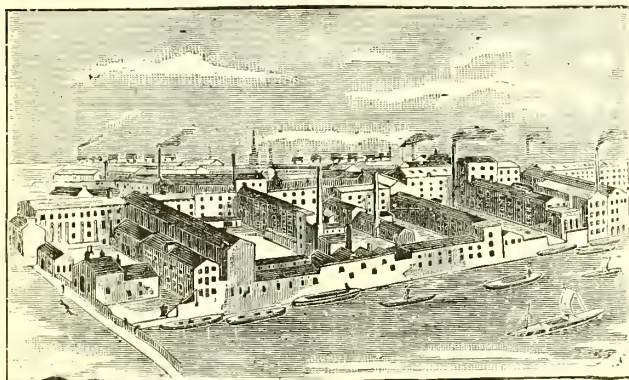
CONTAINING A FLOOR AREA OF EIGHT ACRES.



Warehouse and Offices, White Horse Street—West View.



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Manufactory, Sovereign Street. Frontage 1,048 feet.



GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH,

MOST DELICIOUS SAUCE IN THE WORLD.
In Bottles, 6d., 1s., and 2s. each.

GOODALL'S BAKING POWDER,

THE BEST IN THE WORLD.
1d. Packets; 6d., 1s., 2s., and 5s. Tins.

GOODALL'S EGG POWDER,

ONE 6d. TIN IS EQUAL TO 25 EGGS.
In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

GOODALL'S CUSTARD POWDER,

DELICIOUS CUSTARDS WITHOUT EGGS.
In Boxes, 2d., 6d., and 1s. each.

GOODALL'S QUININE WINE, B.P.

BEST TONIC YET INTRODUCED.
Bottles, 6d., 1s., and 2s. each.

GOODALL'S GINGER-BEER POWDER,

MAKES THE BEST GINGER BEER.
Packets, 3d. and 6d. each.

GOODALL'S BRUNSWICK BLACK,

FOR PAINTING STOVES, GRATES, IRON, TIN, &c.
6d. and 1s. Bottles.

GOODALL'S LAVENDER WATER,

A RICH AND LASTING PERFUME.
In Bottles, 1s., 2s., 5s., and 10s. 6d. each.

GOODALL'S PLATE POWDER,

FOR POLISHING AND CLEANING ALL METALS.
Boxes, 6d., 1s., and 2s. each.

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PURE, STRENGTHENING, AND PALATABLE.
In Bottles, 6d., 1s., and 2s. each.

GOODALL'S BLANCMANGE POWDER,

DELICIOUS BLANCMANGE IN A FEW MINUTES. In Boxes, 6d. and 1s. each.

Proprietors—GOODALL, BACKHOUSE & CO., LEEDS.

PATENT MEDICINES AND GROCERS' SUNDRIES.

Monthly Price List of Patent Medicines, Grocers' Sundries, &c., will be sent post-free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

MITRE TEA.

COMFORT & PROLONG YOUR EXISTENCE

BY DRINKING

MITRE TEA.



Mitre "Broken Leaf"	s. d. 1 4
Mitre "Broken Am. Pekoe"	1 8
Mitre "Thrift" (whole leaf)	1 8
Mitre "Kee-Mun" ...	2 0
Mitre "Amgoorie" ...	2 6



Fac-Simile of Show Card distributed Gratis to all Agents.

MITRE TEA.



Mitre "Broken Leaf"	s. d. 1 4
Mitre "Broken Am. Pekoe"	1 8
Mitre "Thrift" (whole leaf)	1 8
Mitre "Kee-Mun" ...	2 0
Mitre "Amgoorie" ...	2 6

Sold by Specially Selected Agents. Wrapped in $\frac{1}{4}$ -lb., $\frac{1}{2}$ -lb., & 1-lb. Parcels.

VALUABLE AGENCY.

Framed Show Cards, Enamelled Iron Tablets, Posters, Window Transfer, and Handbills with Agent's Name on supplied free. Newspaper and Railway Station Advertisements to suit the requirements of Agents. Applications for Agencies where unrepresented will receive prompt attention. Price Current and Pamphlet, with Terms, post free.

KEARLEY & TONGE, MITRE SQUARE, LONDON, E.C.

ALDGATE,

TOWER TEA.

INJUNCTION.

IN THE HIGH COURT OF JUSTICE, Chancery Division, on the 23rd July, 1887, the case of *THE GREAT TOWER STREET TEA COMPANY, Limited, versus LANGFORD & CO., Plymouth*, was decided. Mr. Justice Stirling (without calling upon Counsel for the Plaintiffs to reply) gave judgment in favour of *The Great Tower Street Tea Company, Limited*, and granted a Perpetual Injunction, with costs, restraining the Defendants from packing their Teas in the manner complained of, or in such way as would lead the public to suppose they were the Teas of the Plaintiffs.



Tower Tea

Registered Trade Marks, Nos. 44,027 and 43,992.

THE ABOVE TRADE MARKS APPEAR ON EVERY PACKAGE.

THE GREAT TOWER STREET TEA COMPANY, Limited, is resolved to protect its Agents in every part of the country, and has instructed its solicitors to proceed in the most peremptory manner against all persons infringing upon its rights. This valuable Agency is a certain source of income—the public ask for the Tea, and Chemist will improve their standing by pushing it.

TOWER TEA is a standard quality. It is widely advertised. Absolutely NO RISK to Agents.

APPLICATIONS FOR THE AGENCY for the Sale of Tower Tea will have prompt attention

THE LONDON BROKEN TEA	for retail at	1/8
ASSAM CONGOU, New Season's Whole Leaf Tea ..	„	1/8
THE LONDON TWO-SHILLING TEA ..	„	2/0

THE GREAT TOWER STREET TEA CO., LD.
3 JEWRY STREET, LONDON, E.C.

PUMILINE.

THE ONLY PURE ESSENCE AND
EXTRACT OF SNOW-GROWN
PUMILIO PINES.

FOR GOUT, RHEUMATISM, SORE THROAT, CHEST AFFECTIONS.

SIR MORELL MACKENZIE wrote, December 9, 1887:—"I have much pleasure in stating that I have made use of Oleum Pumillonis during the last twenty-five years, that I consider it a most valuable preparation. It acts as an admirable tonic to the mucous membrane of the air passages in cases of chronic bronchitis and laryngeal catarrh. I am glad, therefore, to bear that the remedy is about to be used on a large scale, and I have no doubt the results will be highly satisfactory.

(Signed)

"MORELL MACKENZIE, M.D."



THE SNOW-GROWN PINUS PUMILIO.

PUMILINE ALONE, with the single exception of Pinol, possesses the physical and chemical properties which give it the faculty of being administered internally with **SAFETY**. It is, therefore, essential for Chemists to use Pumiline, as it is the only preparation obtained from snow-grown Pumilio Pines.

FOR TRADE PRICE LISTS, PAMPHLETS, ANALYTICAL REPORTS, &c.—

G. & G. STERN, 11 Billiter Square, LONDON, E.C.

ALMILAJ.

The REMEDY by SPECIALITY. PREVENTIVE and CURATIVE.

For Cholera, Diarrhoea, Dysentery, Dyspepsia, Gastralgia, Colic, & all Catarrhal Affections of the Bowels. For Coughs, Colds, Influenza, Bronchitis, Asthma, & all Catarrhal Affections of the Lungs. For Hay Fever, Intermittent Fever, Ague, Neuralgia, & all ailments caused by adverse weather influences.

ALMILAJ is a concentrated medicinal preparation, composed of a specially-designed combination of vegetable products of long-tested and fully-established curative efficiency in the class of diseases above enumerated, and has been largely used in India with the most successful results. This preparation, as well as the name it bears, is the invention of Surgeon-General H. W. BELLEW, C.S.I., Bengal Army (retired), lately, for ten years, Sanitary Commissioner for the Punjab Province; Author of "The History of Cholera in India from 1817 to 1881," and of "A Practical Treatise on the Nature, Causes, and Treatment of Cholera" (TRUBNER & CO., London), &c., and has been specially designed as a Preventive and Curative Remedy in the class of diseases indicated, with the object of supplying a convenient and ready means of treatment, available for immediate use on the spur of emergency. For it is a well-known fact that the prompt and timely treatment of such diseases on the very first appearance of their symptoms—particularly in times of their epidemic prevalence—commonly suffices to check their progress altogether, especially when the action of medicine is aided by proper self-care and attention to clothing and diet, as is fully explained in the Practical Treatise on Cholera above mentioned.

For the purposes of the object stated, ALMILAJ is prepared in a concentrated liquid form, suitable for administration to sufferers of all ages, in small doses apportioned to age and strength without the necessity of any admixture whatever. The doses range from a drop or two for Infants, to forty drops, the full dose for an Adult. The Medicine is prepared with special provision to ensure the preservation of its composition and therapeutic properties for an indefinitely long period under ordinary care, and is put up in flat one-ounce actinic green bottles, for convenience of portability about the person when travelling or away from home, &c. For facility of measuring the larger doses, each bottle is graduated in twelve parts, each part containing the full dose for an Adult.

Price 2s. 9d. per Bottle. Observe the word ALMILAJ is printed on the Government Stamp.

Sold by Chemists and Druggists everywhere, and Wholesale by Messrs. BURGOYNE & CO., 16 Coleman Street, London, E.C.

"The Pills of McKesson & Robbins are quite of the highest class of merit, in respect to the method, in respect to the materials, and in respect to results."—British Medical Journal, October, 1881.

A TASTELESS TONIC LAXATIVE GRANULE.

EXACT
SIZE



McK. & R.
PILLS.

Sample Bottles containing 25 Pills, 7s. per doz.; Bottles containing 100 Pills, 24s. per doz.

Formula, Aloin, Strychnine, and Belladonna.—McK. & R. PILLS.

Aloin, 1-5 gr. | Strychnina, 1-60 gr. | Ext. Belladonnae, 1-8 gr.

Dose.—One pill three times a day. Morning, noon, and night. Where a painless peristaltic action is desired by the aged or female patient, one pill may be taken every night or second night at bedtime, as directed by medical attendant.

BITTER AND NAUSEOUS DRUGS IN PALATABLE GRANULES.

Calcium Sulphide .. 1/10 gr.	Ergotin, equal .3ss, Ext. 3 gr.	Morphine, Muriate 1/2 gr.	Quinine, Bi-Sulphate .. 1/4 gr.	Rhubarb Comp. B.P. ... 5 gr.
" " " .. 1/4 gr.	Enonymin 2 gr.	" " " 1/2 gr.	" " " 1/4 gr.	Salicylic Acid 2 gr.
" " " .. 1/4 gr.	Iodoform 1 gr.	Opium, Powdered 1 gr.	" " " 1/4 gr.	" " " 5 gr.
" " " .. 1/4 gr.	and Iron .. 1/4 gr.	Podophyllin 1/2 gr.	" " " 1/4 gr.	Strychnine 1/10 gr.
Cannabis Indica Ext. 1/4 gr.	Ipecac. Powdered 1/4 gr.	" " " 1/2 gr.	" " " 1/4 gr.	Zinc. Phosphide 1/4 gr.
" " " .. 1/4 gr.	Mercury Bin-Iodide .. 1/4 gr.	" " " 1/2 gr.	" " " 1/4 gr.	" " " 1/4 gr.
Cascara Sagrada Ext. 3 gr.	" Proto-Iodide .. 1/4 gr.	" Comp. 1/2 gr.	" " " 5 gr.	" Valerianate 1 gr.

In this form the ingredients are not only perfectly preserved, but do not affect the teeth, or offend the palate, and, further, can be conveniently kept out of sight by those who object to be regarded as invalids. Complete list mailed free on application.

PLEASE SPECIFY McK. and R. PILLS.

Originated, 1870, by MCKESSON & ROBBINS, New York, U.S.A.

London Agency—Messrs. S. MAW, SON & THOMPSON, 7 to 12 ALDERSGATE STREET, E.C.

Merchants, Shippers, and the Wholesale Houses in the Trade are also supplied by

Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO., 38 Duke Street, Manchester Square, London, W.

[Hospital and Private Formulas]

[consulted at Special Quotations.]

SPRING BLOSSOM CEYLON TEA.

AGENTS WANTED
WHERE NOT REPRESENTED.

FRAGRANT AS THE FLOWERS OF SPRING.
Packed in New Patent Air-tight Circular Boxes. Most Novel and Attractive Package.
in $\frac{1}{4}$ -lb., $\frac{1}{2}$ -lb., and 1-lb. Boxes, to sell Retail at 2/-, 2/6, and 3/- per lb. Set of three $\frac{1}{4}$ -lb. samples post free for 2/- in stamps

SEND TRADE CARD FOR PRICE LIST AND TERMS TO

CAVE, JOHNSON & CO., WHOLESALE TEA AND COFFEE DEALERS, 8 LIME ST., LONDON, E.C.

APPOINTMENT OF AGENTS.

UNITED KINGDOM TEA COMPANY,

21 MINCING LANE, LONDON,

Are prepared to entertain a limited number of applications from Traders of undoubted standing to be appointed Agents for the sale of the Company's Teas. A Liberal Commission will be allowed. The Agency will be found to be a valuable one, entailing little, if any, trouble to the Agent, in addition to which it will be the means of bringing numerous customers to him, who will patronise his general business.

Address the Secretary—UNITED KINGDOM TEA COMPANY, LIMITED,
Offices—21 MINCING LANE, LONDON, E.C.

T. & F. J. TAYLOR'S



AERATED WATERS,
Newport Pagnel.

ESTABLISHED 1835.

SODA, POTASH, SELTZER, AERATED (without Alkali), and LITHIA WATERS,
LEMONADE AND GINGER ALE.

Each Bottle is protected by a Label bearing the Signature of the Firm.

Purity and Excellence of the Water certified by Analysis by Professor ATTFIELD, Ph.D., F.C.S.



A PURE CUP OF TEA

Is obtained in 3 mins. by means of
HOBBS' Patent Antitannic Infuser.

Better Flavour and Less Tea used than with the teapot.

READ OUR
PAMPHLET. } GRATIS and POST FREE.

For Single Cups of Tea HOBBS' INFUSER is unequalled. Its cost is soon repaid by the saving in the quantity of tea used. Price 1s. 6d. from all China Dealers, Grocers, Chemists, &c., or post free direct, 1s. 9d.

HOBBS' INFUSER CO., Limited,

Offices:—12, WOOL EXCHANGE, LONDON, E.C.; CREWKERNE; and 62, NORTH STREET, BRIGHTON.

ROBERT GIBSON & SONS,

MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION,
JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c.

Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,

ERSKINE STREET, HULME, MANCHESTER, ENGLAND.
LONDON DEPOT—1 AUSTRALIAN AVENUE.

"RAMORNIE." LIEBIG'S Extract of Meat.

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Telegraphic Address—CHEMICUS LONDON.

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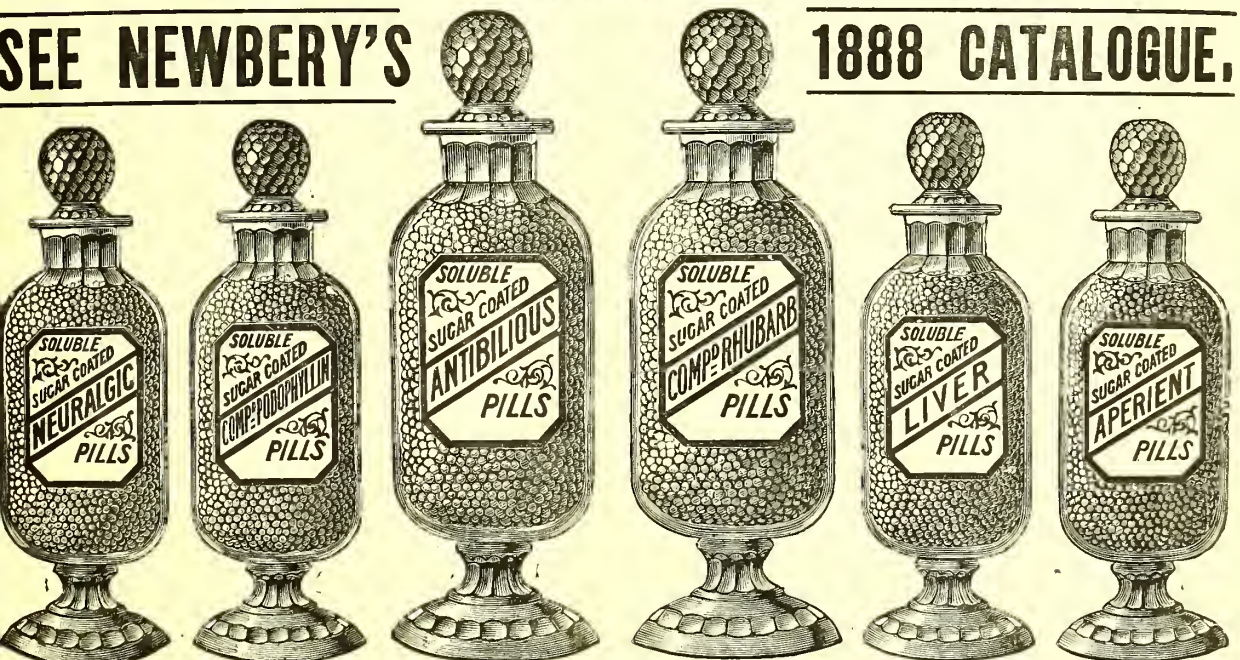
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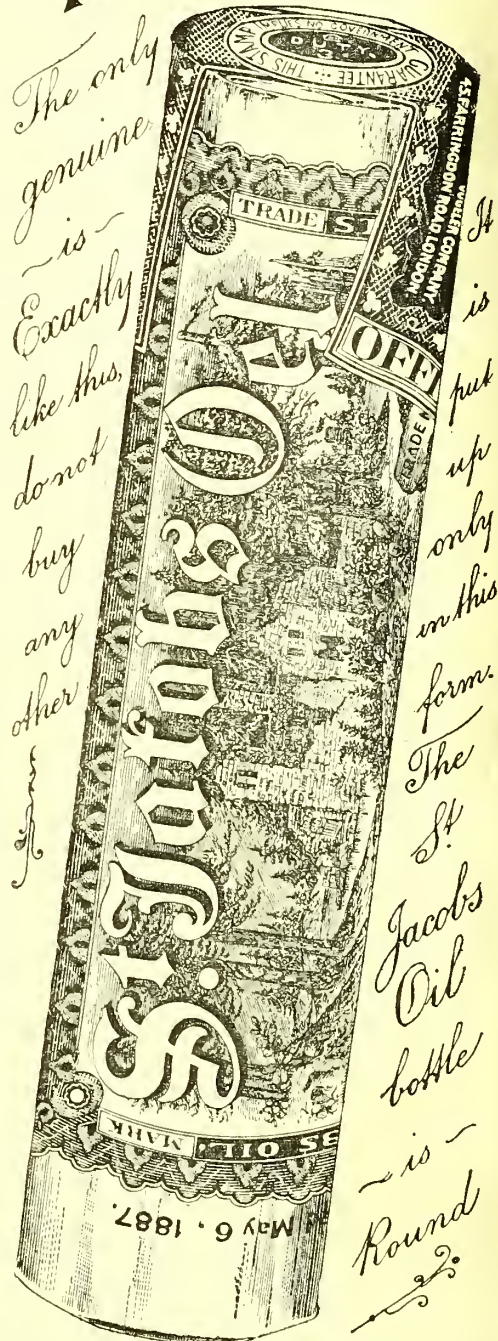
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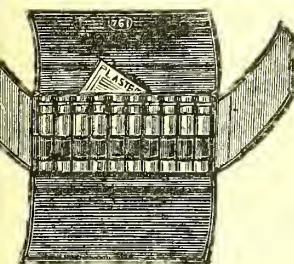
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on. Chloride with Borax, 2 gr.
brin, 5 gr.
th Sub-nit., 5 and 10 gr.
a Citrate, 1 gr.
a Sazrada Ext., 2 gr.
rtic Comp. U. S. P.
al, 5 gr.
Al Hydrate, 5 gr.
amine.
onidia Salicylate, 2 gr.
e with Potash and Borax.
e, and Opium (Dover Powd.), 5 gr.
Powder, 5 gr.
and Quinine Cit., 3 gr.
ive Vegetable.
Carbonate, 2 gr.
anese Dioxide, 2 gr.
Glycerine.
Pure Fairchild).
Saccharated, 5 gr.
ic.
Bicarb., 5 gr.
Chlorate, 5 gr.
Chlorate with Borax, 5 gr.
Nit. (Sal Prunella), 5 gr.
Permanganate, 1 and 2 gr.
ium Bromide, 5 and 10 gr.
ium Iodide, 5 gr.
e, 1, 2, 3, and 5 gr.
ine Sulph., 1 gr.
Reduct., 1 gr.
nic, 1/20 gr.
chnia, 1/30 gr.

{ Quinine Sulph., 1 gr.
Arsenic, 1/20 gr.
strychnine, 1/30 gr.
Rhei Comp., 3 gr.
Rhei and Magnesia, 5 gr.
Rhei and Soda, 5 gr.
Rhubarb, 5 gr.
Saccharin, 1/2 gr.
Salol, 5 gr.
Soda Bicarbonate, 5 gr.
Soda Chlorate, 5 gr.
Soda Chlorate and Borax, 5 gr.
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Soda Salicylate, 3 and 5 gr.
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Sodium Bromide, 5 and 10 gr.
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Tonic Comp. { Fer. Pyrophos., 2 gr.
Quinine, 1 gr.
strychnine, 1/100 gr.
Trinitrine (Nitro-glycerine), 1/100 and 1/50.
Trinitrine and Amyl Nitrite.
Trinitrine, 1/100 gr.
Trinitrine Comp. { Nitrite of Amyl, 1/2 gr.
Capsicum, 1/50 gr.
Menthol, 1/40 gr.

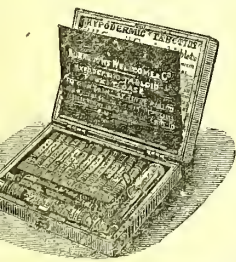
Urethane, 5 gr.
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Zinc Sulph., 1 gr.
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e, empty, 10s; filled with Tabloids, 20s.
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the alkaloids and glucocides are perfectly preserved in the tabloids, and may be quickly dissolved required.



LIST OF HYPODERMIC TABLOIDS.

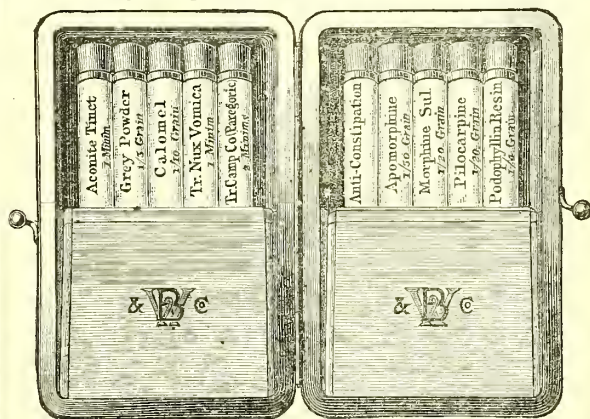
Aconitin ... 1-200 gr.
Alcin ... 1 gr.
Apomorphine ... 1-15 and 1-10 gr.
Atropin Sulph. 1-150, 1-100, and 1-60 gr.
Caffein Sodio-Salicylate ... 1-2 gr.
Cocain Phosphate ... 1-4 gr.
Cocaine ... 1-6 gr. and 1-2 gr.
Colchicin ... 1-100 gr.
Cornutin ... 1-60 gr.
Curare ... 1-12 gr.
Digitalin ... 1-100 gr.
Ergotin ... 1-150 gr. and 1-300 gr.
Eserin ... 1-100 gr.
Homatropin (unirritating) ... 1-250 gr.

Hydrarg. Perchlor. ... 1-60 and 1-30 gr.
Hyoscyamin ... 1-80 and 1-10 gr.
Hyosine ... 1-200 and 1-75 gr.
Morphine Bi-Meconate, 1-8, 1-6, 1-4, and 1-3 gr.
Morphine Sulphate, 1-12, 1-8, 1-6, 1-4, 1-3, and 1-2 gr.
Morphine and Atropin combinations.
Pilocarpin ... 1-10, 1-3, and 1-2 gr.
Quinine Hydrobromate ... 1-2 gr.
Sclerotinic Acid ... 1-2 and 1 gr.
Strophantin ... 1-500 gr.
Strychnine, 1-150, 1-100, and 1-60 gr.

Hypodermic "Tabloids" of the principal drugs and alkaloids supplied to the trade in tubes, containing from 12 to 20 Tabloids, at 12s. per doz. tubes. Send for list of Hypodermic Pocket Cases.

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Belladonna Tinct. ... 1 min.
Calcium Sulphide ... 1/10 gr.
Capsicum Tinct. ... 1 min.
Digitalis Tinct. ... 1 min.
Hydrarg. Perchlor. ... 1/100 gr.
Hydrarg. Cum Creta (Grey Powder) ... 1/2 gr.
Hydrarg. Subchlor. (Calomel) ... 1/10 gr.
Hyoscyamus Tinct. ... 1 min.
Nux Vomica Tinct. ... 1 min.
Tinct. Camph. Co. (Paregoric) ... 2 min.

Price to the medical profession, 8d. per bottle of 50 of the following Tabloid Triturates. Retail price, 1s.

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stipation { Belladonna. Ex. 1-8 gr.
Iocac. 1-16 gr.
Apomorphine Mur. ... 1/50 gr.
Atropin Sulph. ... 1/100 gr.
Digitalin ... 1/100 gr.
Euonymin Resin ... 1/8 gr.
Hydrarg. Iod. Rub. ... 1/20 gr.
Hydrarg. Iod. Vir. ... 1/8 gr.
Morphine Sulph. ... 1/20 and 1/8 gr.
Opium Tinct. (Laudanum) ... 2 min.
Pilocarpin Mur. ... 1/20 gr.
Podophyllin Resin ... 1/4 gr.
Santouin ... 1/2 gr.
Strophanthus Tinct. ... 2 min.

Leather Pocket Case, arranged to contain 10 Tubes Tabloid Triturates, 1s. 6d. empty; filled 5s.

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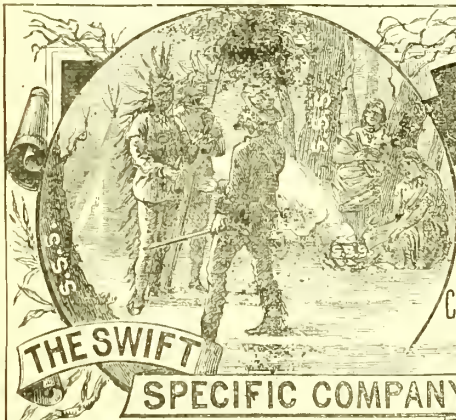
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SPECIAL HALF-YEARLY ISSUE OF THE CHEMIST AND DRUGGIST.—For this important number of this journal, Wednesday next, July 25, is the latest day on which advertisements can be received (except those of employers, assistants, &c., which appear in the Supplement). Firms wishing to address the trade in the United Kingdom or throughout the British Empire (Australasia, India, Canada, South Africa, West Indies, &c.) in the most thorough and effective manner should not let this opportunity pass.

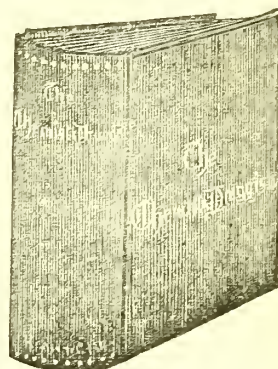
THE PHARMACEUTICAL SOCIETY v. WRIGHT.—It is reported that the defendant in this case has taken out a special case for appeal to the High Court of Justiciary, Edinburgh.

We understand that the trial has aroused much interest among the shopkeeping doctors in Glasgow, and it is threatened that if the decision of Sheriff Birnie be maintained, a petition for the repeal of the section of the Pharmacy Act under which the case was brought will be signed by 400 medical men in that city.

MR. F. W. BRIDGES, one of the publishers of *The Chemist and Druggist of Australasia*, will make a tour through the United States, from San Francisco to New York, in the autumn. He will be glad to call on American firms en route who wish to talk with him concerning the drug business in the Australasian colonies, and those who wish to have an interview with him should address letters to the care of Messrs. John Taylor & Co., 112 to 120 Pine Street, San Francisco, Cal., or to the care of Mr. C. F. A. Heinrichs, 29 Park Place, New York.

CLIENTS of this journal visiting Melbourne for the Exhibition, or sending representatives there, are invited to make use of our office in that city (Normanby Chambers) as a postal address. On information being given to us in London that this will be acceptable, our Melbourne coadjutors will be promptly advised.

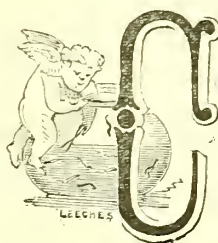
THE reading cases which we offer to subscribers are now used by a very large number of chemists, and are found very convenient. They keep together thirteen numbers in very tidy form, always ready for reference. By having two cases in hand the numbers of a complete volume are always available until the time comes for binding. We sell these cases at the office for 1s., or by parcels post 1s. 3d., or two for 2s. 3d. We cannot forward them to any house for enclosure, nor by any of the carriers, as in the latter case we have to pay for booking.



POST-CARD COMPETITIONS, 1888.

No. 7.

SUBJECTS FOR PAPERS.



CONFERENCE season is approaching, and investigators, writers of papers, and others of that ilk are reminded of the fact by the appearance of the "blue list." Some may not know what the "blue list" is. For their benefit we may explain that it is a four-page quarto sheet issued by the committee of the British Pharma-

ceutical Conference, and containing about a hundred suggestions of subjects for investigation. The peculiarity of the list is that investigators never seem to take any hints from it; but that matters little, for additions are only made to the list about once in a decade or so. This is not as it ought to be, and to put, if possible, some life into the thing, we ask subscribers and assistants to tell us during this month what they consider to be the subjects which pharmacy would be the better of having more light thrown upon. The subjects must, of course, be pharmaceutical; for example:—

- (1) Suggestions on the putting-up of popular household remedies.
- (2) What is the best method of making cold cream?
- (3) How distinguish between annual and biennial heubane in the cut condition.

We do not restrict competitors to any one branch of pharmacy, but we ask them to suggest subjects upon which something profitable may be written in the space of a post-card. Nor will competitors be limited as to the number of suggestions; but we shall award one guinea to the most practical suggestion of all that may be received. A selection from these will be published in our first issue in August, as the basis of another competition, particulars of which will then be given.

Post-cards will be received up to Tuesday, July 31.

ADVERTISEMENTS of employers and assistants can be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

Metropolitan Reports.

THE CAMBERWELL BOARD OF GUARDIANS at a recent meeting unanimously raised the salary of Mr. C. H. Snell, dispenser for the last nine years at the Peckham Dispensary, from 110*l.* to 120*l.* per annum.

MONEY THROWN INTO THE SEA.—In the course of his evidence before the Royal Commissioners, who are inquiring into the affairs of the Metropolitan Board of Works, Sir Joseph Bazalgette, the chief engineer of the Board, stated last week that the cost of chemicals for decolorising the Thames in one year was 80,000*l.* Under the advice of Sir Henry Roscoe no chemicals are used at present. The engineers are watching the state of the river from day to day, and Sir Henry Roscoe tests the condition of the water from time to time.

EXCURSION.—On Saturday last Messrs. Burroughs, Wellcome & Co. gave their employes at the Wandsworth factory and in their City warehouse and offices a treat at the Crystal Palace. The company was visibly larger than that which travelled to Epping Forest last year, the result, we take it, of the firm's unceasing efforts for the advancement of pharmacy. In consequence, too, of the greater number, the sports, which filled the time between ten and two, were more warmly contested and created more enthusiasm. This part of the programme over, the company lunched, then were photographed—with all the smiles upon them that the good things of this life engender. During the three hours which followed each individual wandered whither he or she listed, and at six sharp all sat down to an excellent dinner provided in the terrace dining-rooms. Here Mr. Burroughs presided, and Mr. Wellcome occupied the vice-chair. The dinner over Mr. John Moss rose and gave the toast of the evening, "Prosperity to the Firm," in a neat and characteristic speech. The toast was honoured with enthusiasm, and the partners of the firm replied briefly and earnestly. Then Mr. Burroughs presented the prizes to the successful athletes and smart damsels who had indulged in the milder forms of muscular exercise. Then a surprise was given to a few in the audience—this was the presentation to Mr. Sudlow, general manager to the firm, of a handsome silver-mounted liqueur-stand, as a mark of the regard in which he is held by his fellow-employes. Mr. Kirby made the presentation, and did it well, and after the recipient recovered his breath he made a neat response. There were a few more toasts, then the hall was cleared for dancing, which just capped the pleasures of the day.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BILLERICAY.

CURIOUS WAY OF GETTING POISON.—At an inquiry held last week into the circumstances attending the death of Miss Ellen Morris, of this town, some singular evidence was given, showing the way the deceased had obtained the poison which it was found had occasioned her death.

Mr. Richard Williams, draper's assistant, of 26 High Street, Hampstead, said he had known the deceased nearly six years; she was an assistant in the same establishment with him from 1882 until March last. Witness received a letter from her about three weeks ago, but he had unfortunately destroyed it; it was written from Southend. He had not previously been in correspondence with the deceased. In the letter she apologised for troubling him, but said there was a lady staying at the home (Young Women's Christian Association) at Southend who required a very small quantity of essential oil of almonds, and she wanted it particularly by the following Thursday, as she was going to give a chemical lecture and wanted it for experimental purposes; the smallest quantity would do—less than half a teaspoonful. The reason

she wanted witness to get it was that the chemist at Southend, not knowing this lady, did not care to serve her with it. Knowing deceased to be a highly Christian person, witness felt sure he was perfectly justified in trying to get the oil of almonds for her; he accordingly got it from a chemist's assistant named Pettinger, of 46 High Street, Hampstead. Witness did not sign his book. Witness sent the bottle containing the oil of almonds to deceased at Southend, and she acknowledged the receipt of it.

In reply to the coroner, witness said the deceased was a very amiable person, was of a very high Christian character and was generally of a lively and active disposition; he should never have expected that she was a person likely to take poison for the purpose of destroying her life.

In answer to the foreman, witness said the chemist's assistant told him the oil of almonds was poison. The label on the bottle produced was not the same as that on the bottle sent to the deceased.

After other evidence had been taken, the coroner summed up at considerable length; and the jury, after some deliberation, arrived at a verdict to the effect that the deceased died from prussic acid poisoning, the poison being inadvertently taken. They added to their verdict a rider strongly condemning the conduct of the chemist at Hampstead in illegally selling the deadly poison.

BIRMINGHAM.

MR. BAILEY, who some years ago commenced an assayer's practice in this town in conjunction with Mr. Allen, of Sheffield, and which partnership was dissolved some time ago, has now given up the practice in favour of an appointment as chemist in a Dublin distillery. His business has been taken by Mr. A. E. Robinson, formerly junior partner in the firm of Messrs. Newton, Robinson & Co., Swan Village.

THE FAILURE OF MILK PROSECUTIONS.—The Birmingham and district authorities are in a bit of a dilemma. Most of the prosecutions undertaken by them have resulted in failure, and they are now chary in commencing proceedings against those who are suspected of milk adulteration. The present dispute between the borough and county analysts and a private firm of analysts in the town is giving milk vendors who care to be dishonest a rare opportunity.

ACCIDENT AT A CHEMICAL MANUFACTORY.—On Saturday morning last, at Messrs. Allwright & Wilson's phosphorus works, Oldbury, a man named James Greaves, aged 46 years, was engaged with another man taking chemical refuse up a lift 100 feet high, and depositing it upon a huge mound. After emptying a truck both men pushed it to the lift, which works by hydraulic power. The catch appears not to have been secure, and as soon as the men with the truck got upon it, it began to descend rapidly. Greaves, in endeavouring to jump to the side, got crushed terribly about the body and neck between the bank and the cage. He died shortly afterwards.

A HINT TO CHEMISTS.—The Wednesday early closing movement amongst grocery, drapery, and other business establishments in the town has been pretty generally adopted, but the most sanguine promoters of the system hardly expected it to be carried to the detective department of the Birmingham police. The other evening, however, the following notice was posted by some wag outside the detective office, Moor Street: "This establishment in future will be closed at five o'clock on Wednesdays." If our great community can dispense with the services of the plain-clothed guardians of the peace from such an early hour in the evening, surely it can manage to do without the medicine vendor. At any rate chemists—at least some of them—would occasion no harm in trying the early closing experiment. At present very little has been done in that direction.

BRIGHTON.

CHEMISTS' EXCURSION.—Thanks to the generosity of Mr. Alderman W. H. Cox, an enjoyable day was spent on Thursday of last week by members and friends of the local Association of Pharmacy. At the recent annual dinner of the association, Mr. Cox again invited the members to take a trip up the River Arun in his steam yacht, intimating that Mr. Marshall Leigh (the indefatigable hon. secretary of the

ciation) and himself would undertake the arrangement of whole of the preliminaries. Unfortunately the weather at outset was unfavourable; but subsequently it cleared up, nothing occurred to mar the pleasure of the trip. Shortly 10 o'clock a party of about eighteen assembled at the railway station, among whom were the Mayor of Brighton (Alderman Martin), Mr. W. D. Savage (president of the Association), Mr. Cornish, Mr. Marshall Leigh (hon. secretary), Costerton, Mr. Gwatkin, Mr. Jago, B.Sc., Mr. W. W. Savage, Wyborn, Mr. Salmon, Mr. Harris, Mr. Burgess Smith, Mr. Wood, Mr. Wallis, Mr. Bampton, Mr. Roe, &c. On leaving at Arundel they proceeded to the river, where they met by Mr. Alderman Cox, who gave them a hearty welcome. The trip up the river in the *Cissie* proved highly enjoyable, the pleasure of which was enhanced by the delightfulness of the views of the Duke of Norfolk's park, and of the castle. At Amberley *terra firma* was reached, the company proceeding to the ruins of the castle there, and afterwards visiting the church, which is of the Norman period, the latter dating 1560. The party then returned to the yacht, sat down to a sumptuous luncheon provided by the host. Steaming down the river the Mayor took the opportunity to propose the health of Mr. Alderman Cox, referring to his liberality in providing such an excellent day's pleasure, while he also alluded to that gentleman's public life, now approaching close upon fifty years. Alderman Cox, in replying, said one of the greatest pleasures of life was to give pleasure to others. In this respect it was a source of gratification to him to know that his little trip in the *Cissie* had proved enjoyable. He had been among chemists since June 14, 1826, on which day he was apprenticed to a chemist, and had always found them of good thought, having habits conducive to the general good. He was spared to him for a few years longer, he hoped to be able to do so again under similar circumstances. (Loud applause.) The president and Mr. Jago added a few remarks, expressing appreciation of Mr. Cox's kindness. On reaching the Bridge Hotel it was found that Mrs. Cox had provided a happy tea, to which ample justice was done, and in the various games were indulged in. The party reached Brighton at about 10.30 P.M.

BOSTON.

LOW WATER.—At the Sessions House last week, before Mr. Justice, Charles Hobbs, described as a chemist and druggist from Cheltenham, was charged with begging at Sutter's. He was sentenced to fourteen days' hard labour. The man had his apprenticeship indentures with him, and he had ceased to follow his occupation as a druggist's assistant, and was now doing labouring work when he could find any to do.

DONCASTER.

WIND-BREAKING.—During Friday night of last week the premises of Mr. Allan Hick, Wath-on-Dearne, were broken into. Mr. Hick resides away from his business. On Friday morning everything was left in proper order, but on coming back on Saturday it was found that some person had made an entry, and a broken pane in one of the back windows showed how the entrance had been effected. Some articles were missing, but the aggregate loss to the owner was not large, and to the thief the gain was practically nothing.

HORSHAM.

WHAT THE GUARDIANS PAY FOR DRUGS.—At last week's meeting of the Board of Guardians the present system of apportioning came up for discussion, and Mr. E. Taylor, in the course of a speech advocating a change of system, said that expensive medicines there were only three items tendered for, that they had twelve articles, and these came to a great deal more than those that were tendered for. They spent on one twelvemonth 15*l.* 12*s.* 3*d.* on medicines that were not contracted for, and only 2*l.* 14*s.* 7*d.* on medicines that were contracted for. Another thing was that those that were contracted for were supplied at a great deal less cost price. For instance, they paid 1*l.* a lb. for cod-

liver oil, 1*s.* 3*d.* for quinine, and 1*s.* 6*d.* or 1*s.* 9*d.* for laudanum. Now the last could not be bought under 3*s.*, and quinine under 3*s.* an oz. For those items not tendered for he found the Board were paying 25 per cent. beyond the ordinary retail price.

IPSWICH.

CUTTING COMMENCES.—Ipswich is no longer to be allowed to be without its "drug store." The Provincial Co-operative Drug Company have opened a handsome corner shop at 16 Westgate Street and 1 Providence Street, which is to be managed by Mr. Edward Thornton, who was formerly in business at Leamington, Warwickshire, which business he disposed of some time since and went to Australia, where he enrolled himself as a member of the New South Wales Pharmaceutical Society. Owing to failing health he returned to England, and with the assistance of Mr. Thomas Eastaway as secretary he has commenced this business. Mr. Eastaway was formerly manager of the Plymouth branch of the County Co-operative Drug Company, whose headquarters are at Cheltenham.

LIVERPOOL.

CARBOLIC ACID POISONING.—Four deaths from carbolic acid poisoning were reported to the police in Liverpool last week.

NEWCASTLE-ON-TYNE.

THE BRITISH ASSOCIATION.—There is much enthusiasm here regarding the visit of the Association next year. A public meeting was held last week, at which a general committee was appointed, and since then the Sunderland Town Council have deputed the Mayor, Alderman Preston, and Mr. John Harrison to represent the town on the committee.

BRITISH PHARMACEUTICAL CONFERENCE.—A meeting of the chemists and druggists of Newcastle and district was held on Monday, in the Durham College of Science, to consider the advisability of inviting the British Pharmaceutical Conference to hold its meeting in Newcastle in 1889. Councillor John Harrison, of Sunderland, was voted to the chair. The object of the meeting was explained by Mr. B. S. Proctor, who had called it. He proposed that the Conference be invited to hold its meeting next year in Newcastle, and that Messrs. N. H. Martin and J. Harrison be appointed to convey the invitation to the Conference meeting in Bath. This was carried unanimously. Mr. Proctor was able to announce that 60*l.* was already promised towards the entertainment fund. A general and an executive committee were then appointed, with Mr. N. H. Martin as chairman, Mr. B. S. Proctor as treasurer, and Mr. T. Maltby Clague as secretary.

NATIONAL VETERINARY ASSOCIATION.—This association held its sixth annual meeting in Newcastle this week, under the presidency of Principal Williams, of the New Veterinary College, Edinburgh, who delivered an address on Tuesday, and following that there was an interesting discussion on "The importance of the study of comparative pathology" initiated by Dr. H. E. Armstrong. Then Mr. Archibald Robinson, F.R.C.V.S., of Greenock, read a paper on inoculation, in which he advocated compulsory inoculation in pleuro-pneumonia. This concluded the serious business of Tuesday, although the members dined together that night. On Wednesday the reading and discussion of papers was resumed, Professor Fred Smith, of Aldershot, contributing an interesting article on diseases of the foot in the horse, and Mr. E. Faulkner, M.R.C.V.S., of Manchester, discoursing on "Veterinary Education and Requirements." In the course of the day Professor Smith operated upon a horse which was a "roarer," with the object of effecting a cure. The horse was chloroformed by Mr. Bell, of Carlisle, the anæsthetic being administered with an apparatus which throws the horse over with one ounce. The operation was performed in the presence of the members of the Association, who watched it narrowly, and were greatly interested. It was resolved to hold the next meeting in London, Professor Pritchard, of the Royal Veterinary College, being elected President.

WORCESTER.

DEATH FROM VERMIN-KILLER.—An inquest was held on July 11 on the body of Thomas Edwards, a miller of Barbourne, aged 69, who had committed suicide by taking Sandford's vermin-killer. Mr. J. A. Steward, chemist, High Street, was called and gave evidence that he knew the deceased, and saw him last on June 30 in his shop, when he purchased a packet of Sandford's mice-poison, for which he paid 3d. Witness kept a register of the sale of poisons. The register produced was signed by the deceased. He simply asked for a packet of "Sandford's mice-poison." Witness asked him what size packet he would take, and he replied, "A small one." Witness then asked him what it was for, and deceased replied, "For mice." Witness supplied him with a packet, and asked him to sign the book. There was nothing in his manner to arouse suspicion. He had been a customer at witness's for several years. He had purchased a 6d. packet of the same poison on April 25, saying he wanted it to destroy an old dog. Other evidence was given, and the jury ultimately came to the conclusion that deceased committed suicide while temporarily insane.

IRELAND.

PHARMACEUTICAL SOCIETY OF IRELAND (July examinations for the licence).—Passed candidates: Messrs. J. A. Walsh, H. Montgomery, A. C. McBride, P. S. Pearce, T. D. Tate, J. J. Eggleston, J. J. Scott, M. O'Donnell. There were four rejected.

PROSECUTION UNDER THE PHARMACY ACT. At Ballybay Petty Sessions, on Monday, two local merchants, who are also dealers in drugs, named Thomas McCabe and Patrick Fee, were summoned at the instance of the Pharmaceutical Society of Ireland for having, in contravention of the 30th section of the Pharmacy Act, compounded medical prescriptions, not being duly qualified, as required by the Act. Mr. Ryan, solicitor, appeared for the prosecution; and Mr. Molloy defended McCabe. Fee was not professionally represented. Mr. Ryan produced the register of duly qualified pharmaceutical chemists in Ireland. The Court required proof of the signature of the registrar of the society to the certificate attached to the register, as also the signatures of the president or two members of the council. The evidence not being forthcoming, the bench adjourned the cases for a fortnight to enable the prosecution to produce the necessary evidence.

THE AMERICAN DOCTOR AND HIS MANNIKIN.—At the Southern Police Court, Dublin, on Monday, before Mr. Byrne, James Fagan, of 18 Great Brunswick Street, was summoned by Wm. H. Hartley, better known as "The American Doctor," to show cause why he detained "a wax mannikin," which Mr. Hartley claimed to be his property. Mr. Walsh, who appeared for Mr. Hartley, said the doctor used this mannikin for the purpose of illustrating his lectures on medical treatment.

A little wrangle followed, the cause of the detention being apparently that the defendant claimed more for the storage of the mannikin and some other things than the claimant said was agreed upon.

Mr. Byrne said he could not allow this matter to be gone into. There was no lien on the articles for rent of the store.

Mr. Gerald Byrne (solicitor for the defendant) said this imaginary doctor was leaving the city owing Mr. Fagan money, and they would prove that he owed Mr. Fagan 3l. for rent. He should not be allowed to make away with the money.

Mr. Walsh: That is an unwarrantable statement. We are ready to pay all we agreed to, but not a dollar more. It is a shabby thing to keep our mannikin.

Mr. Gerald Byrne: It is a shabby thing to go away with our money.

Mr. Walsh: We are ready to pay all we owe, and no more. You should not say that about Dr. Hartley. He has left 1,500l. to the charities of the city.

Mr. Fagan: Will he pay anything at all? He has not paid sixpence yet.

Mr. Byrne said that the mannikin should be given up, or 5l. compensation paid for it, and the complainant should have 10s. costs in any case.

SCOTLAND.

ABERDEEN.

ANALYST'S REPORT.—Mr. Thomas Jamieson, F.I.C., public analyst for the city, in his report for the past month, states that of the seventeen specimens of lemonade and soda water, all, with one exception, contained traces of lead, varying from .01 to .05 grain per gallon.

RESIGNATION OF PROFESSOR BRAZIER.—Professor Brazier is about to tender his resignation of the chair of chemistry, which he has held since 1862. The professor has been incapacitated since early spring through serious illness, and as the summer session is just at a close, the students in chemistry met to express their regret that the Professor, who is very popular with the students, should find such a step necessary. They had hoped to have the pleasure of again seeing him between the familiar pillars lecturing and performing his beautiful and dexterous experiments at which he had no peer; but now they were led to understand he had resolved to quit the chair from which he had lectured for well-nigh three decades, they resolved to express the sympathy they felt for him in his illness, and the hope of a speedy recovery. On several occasions the learned professor has delivered lectures under the auspices of the Aberdeen and North of Scotland Society of Chemists and Druggists.

DUNDEE.

UNIVERSITY COLLEGE.—At a meeting of the Council last week it was resolved to endow a chair of botany in the college with the 6,000l. which the family of the late Mr. J. F. White gifted to the college some time ago. During the past session Mr. Patrick Geddes, of Edinburgh, delivered lectures in botany at the college, and it is expected that he will be appointed to the new chair. The college now teaches all the subjects for the first professional examination for medical degrees, and in addition anatomy will very soon be practically taught.

EDINBURGH.

FIRE.—On Sunday morning the scap-works in Broughton Road, occupied by Messrs. John Taylor & Co., were completely destroyed by fire, the damage done being estimated at from 8,000l. to 9,000l.

SEA-SICKNESS.—A correspondent of the *Scotsman* has revived the demand for bromide of sodium as a remedy for sea-sickness. The bromide, taken in doses of 25 grains, in a little water, three times a day, after meals, is, he says, an almost infallible cure. It should be commenced about three days before going on board, so as to get it fairly into the system, and continued so long as rough water is experienced.

A SUSPECTED CHEMIST'S ERROR.—On Saturday last a woman named Waugh and her child, 12 months old, were brought to the Infirmary suffering apparently from some narcotic poison. The woman had sent to a neighbouring druggist for some tincture of rhubarb, some of which she gave to her child and some she took herself. Both recovered after five hours' treatment at the Infirmary. The druggist denied that any mistake had been made, but the affair, which has been noted by the police, created an immense stir in the street in which it occurred.

CREASOTE OR CREOSOTE.—Commenting on a note which we recently printed regarding creosote, the *American Druggist* says:—"While *crea-sote* is defensible on the analogy of such Greek compounds as *krea-dosia*, 'meat-bestowal,' *krea-nomia*, 'meat distribution,' &c., which occur in the literature, yet the form with *o*—as representing the genitive—is much more common. In earlier authors the *o* is short (*o*); in later ones the long *o* (*ω*) is more usual. Thus we find: *kreo-boros*, 'meat-eating,' *kreo-poles*, 'meat-dealer,' &c., &c. We, therefore, are likewise in favour of returning to the former spelling: *creosote*."

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE HYÈRES POISONING CASE is far from concluded, as the State's attorney and the Comte de Villeneuve have appealed to the Aix Court, the public prosecutor deeming the sentence too light, and the count finding it unjust.

TO MEND CELLULOID ARTICLES the Lorraine *Journal de Pharmacie* recommends to wet the two edges with glacial acetic acid, and to press them close together for a short time. The cementing will be found perfect, and lasting.

F. SCHNEEGANS, a pharmacist of the first class, doctor of chemistry, and formerly a pupil of M. Musculus, has been appointed pharmacist-in-chief of the Strasbourg civil hospital, in place of his deceased preceptor. At the time of his appointment M. Schneegans was chemist for Messrs. Schimmel & Co., at Leipzig.

DISTINGUISHED SCIENTISTS.—At the Academy of Sciences meeting of July 16 Professor Langley, the newly elected corresponding member for England, and Mr. Alexander Graham Bell, of America, sat close to one another, and were specially welcomed by the President, who recalled the English physicist's works on the sun's constitution, and Mr. Bell's discoveries in connection with the telephone and photophone.

EXPLOSION IN A PHARMACY.—A fatal accident occurred, July 14, in the afternoon, in the pharmacy of M. Crozet, rue du Marché-Popincourt. The porter, a young man named Auguste Delaplace, was in the laboratory behind the pharmacy, trying to prepare coloured fires for the evening's illumination, when the mixture exploded in the stone mortar, and flew to pieces, fatally wounding the inexperienced porter, and slightly injuring in the hand a customer at the dispensing-counter. Much material damage was done, but Crozet escaped unharmed.

GALVANISED IRON CONDEMNED.—On being consulted by the Paris Council of Hygiene have disapproved of the use of galvanised iron vessels for holding or measuring liquids intended for alimentary purposes. Owing to their smallness large tanks and measures were sought to be substituted, but they offer the danger of rapidly contaminating with zinc most liquids happening to come into contact with them. In consequence of the decision, the administration will refuse to affix the legal stamps on any vessels of this description, and will only allow, as heretofore, tinned copper or tinned iron.

PHYLOXERA AND GOBLINS.—Phosphorus is one of the remedies now used against phylloxera, and it is supplied by trade in the shape of 15-grain balls, which are to be buried some 6 inches underground near the vine, and covered with a layer of plaster to keep the vapours near the roots. The chemical appears to act both as a poison for the parasite and as a fertiliser for the plant, but the *Bulletin* of the French Pharmaceutical Society advises his brother pharmacists to caution their customers that vineyards thus treated are liable to become resorts for will-o'-the-wisps. In the out-of-the-way places a haunted vineyard would be dreaded by labourers, and the owner himself regarded with suspicion.

ALL CHEMISTRY.—A lady at Lille, having accidentally destroyed a bundle of papers containing, she said, some twenty-nine 1,000f. notes of the Banque de France, last week applied to the bank to have the face value of the notes refunded, offering as vouchers the ashes of the defunct documents, mixed up with the cinders of the other papers and letters, most likely. The bank has been good enough to send one of its expert chemists to examine the remains in question and report upon the claim. If the papers are to be believed, the Lille natives are convinced the bank has experts clever enough to distinguish not banknote ashes from foreign cinders, but even those of 50f. or 500f. from a 1,000f. note. It would be unjust to bank chemists not to add that they claim nothing of the kind.

ONLY COUNTERFEIT HONEY ALLOWED.—The old-time conflict between Paris sugar-refiners and bee-keepers has broken out again. At first the *Raffinerie Parisienne* tried

the efficacy of a lawsuit against cunning bee-keepers who purposely establish hives at a convenient distance to prey on their neighbours' sweets. Various coloured powders were used by the company's chemist to identify the bees and their owners, but somehow the proof was not conclusive, and the suit failed. The refiners, however, have been more successful on applying to the police. They represented, not only the material damage sustained through the depredations of the insects, but the dangers from their stings, the workmen, often naked to the belt, being frequently injured by the bees, and horses running madly away under their attacks. An idea of the number of invaders may be formed from the fact that one bee-keeper on the Buttes-Chaumont, inside of Paris, had no less than 1,000 hives, containing on an average 40,000 bees apiece, and traps set in the Say Refinery caught some twenty gallons (one hectolitre) of bees a day. After consulting with the Council of Hygiene, the Prefect of Police has finally issued an order forbidding bee-keeping within the city limits. So that bees have been expelled as unceremoniously as nuns from hospitals, and none but artificial honey will now be allowed to be made in Paris.

PURIFICATION OF MERCURY.—At a meeting of the Paris Chemical Society held not long since, Professor J. B. Crafts, of Boston, U.S.A., a regular member of the association, presented, through M. Friedel, an interesting paper on an easy process for purifying mercury without distillation. The metal is to be placed in a glass tube, 5 centimetres (2 inches) in diameter and 1.5 metre (5 feet) in length, supported by a sloping wooden trough, the lower end of the tube being provided with a funnel to introduce the mercury and a glass faucet to draw it off, and the upper part being connected with any convenient air-pump, air bubbles are made to pass for about forty-eight hours through the mercury. After this time, and most often much sooner, the ordinary impurities—that is, lead, zinc, tin, sulphides, &c.—will be found separated in the form of a light black powder, while the surface of the mercury will show the characteristic shining appearance of pure quicksilver. The process in question is sufficient to separate all the baser metals, and thus render mercury fit for barometers and such instruments. But gold and silver cannot be got rid of at the same time, and nothing short of distillation will suffice when absolute chemical purity is desired. For barometric and optical purposes, however, the minute quantities of precious metals occasionally found in mercury—one centigramme or less per kilo.—are not objectionable because they scarcely change the sp. gr., and in no way interfere with the shape of the meniscus. On the contrary, as little as one centigramme per kilo. (one in one hundred thousand) of lead, zinc, or tin is more than enough to render mercury unfit for technical purposes. So far, so good; the paper is useful and practical, but it raised quite a breeze in the Chemical Society. At the following meeting M. Maumené attacked Mr. Crafts' process, not because it is a bad one, but because Berzelius long before showed that base metals contained in mercury can be oxidised by agitation with air, and he (Maumené), in a treatise on chemistry presented in 1835 to the Society, related how he had often purified mercury from all but the precious metals by attaching to his carriage-wheel a flask containing a kilo. of the metal. It may be added that by Professor Crafts' process 40 kilos. of mercury can be treated at a time; and, after discussion, French chemists have come to the conclusion that a carriage not being within the reach of every one of them, a common glass tube connected with a self-acting pump is more scientific, and otherwise preferable.

GERMAN PHARMACEUTICAL NEWS.

(From our Berlin Correspondent.)

KREOSOLIN is the name of an imitation of creolin, which has just been introduced. It gets the credit of being a better article.

VINEGAR AS AN ANTISEPTIC.—Dr. Engelmann is extolling the valuable antiseptic virtues of vinegar—which have probably been known nearly as long as the liquid itself. The good doctor recommends it specially in gynaecology in the *Centblatt. f. Gynaekol.*, and claims that a 3-per-cent. aqueous solution of vinegar is as potent as carbolic acid or corrosive sublimate.

SALICYLATE OF MERCURY.—This compound is being energetically pushed and recommended. As the double salt with sodium chloride is more soluble than the salicylate itself, it is better adapted for use in practical surgery. This double salt has the formula $C_6H_4 \begin{smallmatrix} \diagup COO HgCl \\ \diagdown O Na \end{smallmatrix}$ and contains 50 per cent. of salicylate of mercury.

PILOCARPINE HYDROCHLORATE has been often noticed to fail in producing the desired effect, to the annoyance of both patient and medical attendant. This want of activity and of certainty in action, it is suggested in a communication to the *Therap. Monatsh.*, is due not so much to deterioration through keeping as to the presence of jaborine, which is formed during the isolation of the principle by the action of any acid liquid upon it.

GERM-FREE AIR.—Micro-organisms are believed to be the exciting cause of febrile diseases, agues, &c., particularly in the moist and miasmatic situations so often found in tropical climates, where the germs are naturally cultivated and nurtured in marshes and the like. Dr. Möller has now patented a kind of air-filter which separates the microbes in a manner described as perfect. The apparatus is said to be easily used, although somewhat complicated, and to be moderate in price.

CURIOUS CASE OF FORGERY.—An interesting police case has been decided in Berlin. A young girl was charged with forgery under the following circumstances:—She had heard that arsenic was very good for improving the complexion, and therefore looked up an old prescription for "arsenic drops" of a Dr. Possner. She increased the figure indicating the amount of arsenic, and got the medicine without any difficulty. Believing that some benefit accrued from the taking of the remedy, she made a copy of the prescription to give to a friend. This was detected by the pharmacist, and the girl was indicted as already indicated. The prescription was legally regarded as a document, and the accused sentenced to three days' imprisonment.

THE SIMON APOTHEKE.—Reference has previously been made to this "apotheker" as being the oldest chemist's shop in Berlin, and as having celebrated its fourth centenary in February last. It was in 1488 that the Berlin Town Council gave the first privilege to the chemist who opened this shop. This included the right of the concession to be considered hereditary, and it also included a condition that no competition should be allowed. The holder was also entitled to a quantity of meal and to free lodging, and also to sell sweets and beeswax. Three years later the licence was made a Court Pharmacist. Only in 1508 did any second "apotheker" arrive to disturb the monopoly of the "Simon apotheker." Times have changed since then, even in Germany.

IRRITATING GLANDULAR HAIRS.—At a recent meeting of the Lower Rhine Natural History and Medical Society Dr. Johow made a communication on some of the Euphorbiaceæ of Brazil, particularly *Tragia volubilis*, which are known to possess stinging glands and hairs. He found that the burning properties of the hairs were due in some cases to the introduction beneath the skin of sharp acicular crystals of calcic oxalate, one or more of which are contained in the very thin-walled end cells of the trichomes. Hence it appears that the irritation thus produced is principally mechanical. The irritating qualities of the hairs of *Muevna pruriens* are consequent upon their exceeding tenuity and sharpness, together with a high degree of rigidity consequent upon thickening of the cell-wall.

BRIEGER ON PTOMAINES.—Professor Brieger gives some particulars regarding the ptomaines tetanine and mytilotoxine in Virehow's *Archiv.* The first named has been quite recently isolated from the arm of a patient who had suffered from tetanus. Brieger made cultures of the bacterium which is associated with the production of the ptomaine, and thus obtained the latter in sufficient quantities to enable him to study its chemical properties. He found that a hydrochlorate of tetanine after six months had not suffered any apparent decomposition, but had nevertheless lost all toxicity. The Professor received considerable quantities of mytilotoxine prepared from poisonous mussels, and he observed the same phenomenon with this—it changed in colour and physiological effect on keeping. Of tetanine he was able to prepare crystalline double salts with platinum.

TRADE WITH CHINA.—The commerce of Northern China is not without considerable importance to Germany, which has the first place as exporter of colours and aniline dyes to that region. The amount of these articles sent there from this country is constantly increasing, being now 90 per cent. of the whole, while the trade with England is falling off. The usual form of package is the 2-oz. bottle or the 8-oz. tin (English weight). One or two hundreds of the former and from fifty to one hundred of the latter are packed in a case. In glass ware we cannot compete with Belgium for cheapness. The trade in mercurials and santonin is also in the hands of the Germans, and some firms make a speciality of "worm bonbons." The import from Germany is valued at from 3,000,000*l.* to 4,000,000*l.*, and is increasing in value. So far as trade as a whole with these parts is concerned, England is in the first place and Germany comes next.

NEW COMPANIES.

HANSON (LIMITED).—Capital, 5,000*l.*, in 1*l.* shares. Object, to manufacture mineral, aërated, and fermented waters, and to engage in brewing, in all its branches.

JEETWARPORE INDIGO PLANTING COMPANY, (LIMITED).—Capital 75,000*l.*, divided into 55,000 preference shares of 1*l.* each, and 20,000 ordinary shares of 1*l.* each. Object, to purchase the indigo factory of Jeetwarpoore in Tirhoot, and to carry on in Behar (Bengal) and elsewhere the business of planters of and dealers in indigo, fruits, root crops, and other produce.

STERILINE (LIMITED).—Capital, 200,000*l.*—50,000*l.* in 5*l.* shares, and the rest in 1*l.* shares. Object, to purchase from Lucien Benoist the patent rights of a chemical antiseptic, for the arrest of decay in animal and vegetable products, and to manufacture the same or similar preservative agents. The first subscribers are:—F. H. Sumner, 17 Queen Anne's Gate, Westminster, S.W.; J. B. Holland, St. Stephen's Club, W.; H. W. Spence, clerk, 2 Eastbourne Villas, Rosendale Road, S.E.; A. W. Nicholson, 43 Coleman Street, London, E.C.; C. E. Mosse, 30 Oxford Road, Ealing; S. H. Love, 160 Rolls Road, Old Kent Road, S.E.; W. E. Marsh, 6 Pelham Road, Wanstead, E.

THE PURE SPIRIT COMPANY (LIMITED).—Capital, 200,000*l.*, in 5*l.* shares. Object, to carry on the business of distillers and refiners, and manufacturing chemists, and to acquire the patent rights in connection with processes for purifying alcohol, belonging to Thomas Gilbert Bowick. The first subscribers are:—A. Brunton, 18 Finch Lane, London, E.C.; G. Cawston, Hatton Court, London, E.C.; W. Morris, 7 Drapers' Gardens, London, E.C.; J. T. Worth, 3 Gracechurch Street, London, E.C.; F. G. A. Hitchcock, 86 Edith Road, West Kensington, W.; W. Stergel, 46 Queen Victoria Street, London, E.C.; T. Gilbert Bowick, Cumberland House, Frithville Gardens, W.

THE QUININE BITTERS MANUFACTORY COMPANY (LIMITED).—Capital, 50,000*l.*, in 35,000 ordinary shares of 1*l.* each, and 15,000 deferred shares of 1*l.* each. This company is established to purchase the secret recipe or preparation known as "Quinine Bitters," and certain other proprietary medicines and articles, and the well-known business of Mr. Gwilym Evans, of Llanclly, in connection therewith. The following are the subscribers to the memorandum of association, each of them taking 200 shares:—George Robert Barclay, 95 Farringdon Street, London, managing director to Barclay & Sons (Limited); Dan Harries Evans, of 10 Cornwall Terrace, Regent Park, London; also of 314 to 320 Oxford Street, draper and silk mercer; Alfred Thomas, of Park Place, Cardiff, Member of Parliament; Evan Morris, of 16 Peel Street, Prince's Park, Liverpool, senior partner in the firm of Morris and Jones, wholesale grocers, 13 Sir Thomas's Buildings, Liverpool; Owen Isgoed Jones, of Llanrwst, North Wales, chemist; John Davies Penny, of 33 Redcross Street, Liverpool, manager to D. Jones & Co., wholesale grocers; Robert John Elliott, Ph.D., 69 Church Street, Liverpool, chemist. The articles of association provide that the first directors are George Robert Barclay, Esq.; Alfred Thomas, Esq., M.P.; Owen Isgoed Jones, Esq.; and Gwilym Evans, Esq. The qualification for directors is not less than 100 shares of 1*l.* each. Mr. Gwilym Evans will act as managing director.

Legal Reports.

END OF THE HOP BITTERS LITIGATION.

BECK v. HOP BITTERS COMPANY—HOP BITTERS COMPANY v. BECK.—These actions were mentioned, on Friday (July 13) before Mr. Justice Stirling. The action brought by Beck against the company was dismissed without costs. In the second action the defendant submitted to a perpetual injunction with regard to the "make up" of the bottles in which the bitters were sold, but not with regard to the trade-mark. The money paid into court as security for costs to be repaid. Mr. Swinfen Eady appeared for the company, and Mr. Neville for Mr. Beck.

THE WHITE ROSE PERFUME CASE.

THE action of Messrs. J. & E. Atkinson, 24 Old Bond Street, against J. Atkinson & Co., of Finsbury Square, was heard on Wednesday before Mr. Justice Kay, sitting in the Chancery division of the High Court of Justice.

Mr. Marten, Q.C. (Mr. Allen with him), for the plaintiffs, said the case against the defendant was that he carried on business in such a manner as to represent that his business was identical with that of the plaintiffs, and that the white rose perfume which he sold was manufactured by the plaintiffs. The plaintiffs were established in 1799, and had carried on business at 24 Old Bond Street for fifty-five years, and for forty years had been carried on under the style of J. & E. Atkinson. The bottles made exhibits in the case showed that the defendant sold white rose perfume in bottles similar in shape and size, and labelled with the same kind of label as the plaintiffs' bottles of perfume. The evidence would show beyond all doubt that if anyone spoke of Atkinsons, London, the plaintiffs were meant.

His Lordship: Is Atkinson the real name of the defendant?

Mr. Marten: Yes. What he has done beside selling these bottles of perfume is to make representations.

His Lordship: There is a case in which the Court refused to prevent a man carrying on business in his own name—*Christy v. Christy*, the picture dealers.

Mr. Marten: I think an injunction was ultimately granted in the case.

His Lordship: No. You cannot prevent a man carrying on business in his own name.

Mr. Marten: I had better put in my evidence, which goes to show that the defendant has made representations to the effect that there is a connection between his business and the plaintiffs'.

The following evidence was then called:—

Mr. Harold R. Pink, examined, said he was a grocer and provision merchant, carrying on business at Landport, Southampton, and elsewhere. Last year a traveller representing the defendant called on him and showed sample bottles of white rose scent. The traveller said he represented "Atkinson, London." [Invoice produced.] The same traveller called again in February or March 1887. Witness then said he believed the firm was not the same as the Bond Street firm. The traveller was confused, and said, "No, but it is all the same thing. J. & E. Atkinson have had a split." The traveller's name was Thompson, and he said in conversation at the Atkinson which he represented was a brother of the Bond Street Atkinsons. [Bottles of scent supplied to witness by the defendant produced.]

Cross-examined by Mr. Wilkinson: Did not deal with J. Atkinson, London, before 1886. Was under the impression when giving the order that he was purchasing the goods of Messrs. J. & E. Atkinson, of Old Bond Street; the name and the raised letters around the bottle gave him that impression. In 1887 Mr. Thompson said frankly that J. Atkinson was the Atkinson of the firm of J. & E. Atkinson, Old Bond Street. He also said that J. Atkinson was practically the same firm as J. & E. Atkinson.

Mr. Lane, tobacconist, Cirencester, gave evidence to the effect that a representative of the defendant called on him and obtained an order for perfumery. The traveller told him that the firm J. Atkinson & Co. was "in league" with, and was an offspring of, J. & E. Atkinson, Old Bond Street.

Mr. Walter Nash, buyer at Whiteley's, said on April 12,

1887, the defendant's traveller called on him and solicited an order for Atkinson & Co. In conversation the man said J. Atkinson was the nephew of J. Atkinson, of Bond Street, and that his uncle had set him up in the perfumery trade. Witness thought this very curious, and gave him no order.

Cross-examined: Perfume manufacturers used similar bottles for their perfumes; the labels varied. Messrs. J. & E. Atkinson's was in some respects peculiar. Witness informed plaintiffs on the following date, and asked them whether the story told by the defendant's representative was true.

Mr. James Atkinson (Messrs. J. & E. Atkinson), examined, said he had been connected with his firm for twenty-nine years.

Is the defendant, James Atkinson, any relation of yours?—Not to my knowledge.

Has he ever been connected with your firm?—No.

When did you first hear of him?—In the autumn of 1886. Had examined some of the defendant's white rose perfume and found it very inferior in quality. The bottles in which it was sold were very similar to the plaintiff firm's, and anyone might be deceived. The wholesale price of the perfume in the size bottles produced was 23s. per dozen; the defendant's price for the same size was 24s. per dozen.

Cross-examined by Mr. Wilkinson: His complaint against the defendant was that he was going about pretending to be a branch of J. & E. Atkinson, and getting orders under that pretence. The bottles were very similar.

Mr. Barrett (manager of the plaintiff's firm) said the leading perfumers made up their scents in bottles similar to those used by the plaintiffs. There were exceptions to the rule. Never heard of the defendant as a manufacturing perfumer before 1886.

Mr. Grossmith, wholesale perfumer, 85 Newgate Street, examined, said if anyone referred to Atkinson's perfumes in the trade, the plaintiffs' firm would be understood. At one time the defendant was in his employ.

This was the evidence for the plaintiffs.

Mr. Wilkinson submitted that he had no case to answer.

His Lordship: The case is that you have committed a gross fraud on the plaintiffs; that is the case which you have to answer.

Mr. Wilkinson submitted that there was no fraud in law for him to meet. The plaintiffs did not press that part of their case relating to the similarity of bottles, and so he need not trouble the Court with that branch of the case.

His Lordship: The plaintiffs say that your agents have been going about the country stating that the defendant is in league with, is an offshoot from, or is identical with the plaintiffs' firm.

Mr. Wilkinson: We deny most distinctly that we ever instructed any of our travellers to make any such representation. On the contrary, the defendant has strictly charged his agents not to represent that there was any connection with the Bond Street firm.

James Atkinson, 5 Finsbury Square, the defendant, examined, said he had over and over again instructed his travellers not to mix up his business with that of Messrs. J. & E. Atkinson. The bottle which he used was common to the best manufacturers of perfumes.

Cross-examined: Was frequently asked by people whether he was or not connected with the Atkinsons in Bond Street, and he always denied it.

Mr. George Thompson (traveller) was then called, but refused to give evidence before his account was paid. The account was not paid, and witness left the box.

Mr. W. H. Atkinson (clerk to the defendant) said he had often heard the defendant warn travellers against representing that he was connected with Messrs. J. & E. Atkinson.

A traveller named Marks stated that the defendant had told him that the plaintiffs had nothing to do with the business.

Mr. Wilkinson addressed the Court for the defendant.

His Lordship (without calling on Mr. Marten to reply) said he was of opinion that a plain and palpable fraud on the plaintiffs had been committed. The defendant had pointed out some differences in the bottles used by him and the plaintiffs, but the differences were difficult to detect, and though the defendant's label was not the same as the plaintiffs', they were so like as in his opinion to be calculated to deceive. His Lordship then referred to the evidence as to misrepresentation on the part of the defendant's travellers to

customers, and, holding that deliberate misrepresentation had taken place, granted an injunction against the defendant, his travellers, servants, and agents, from representing that the defendant is a member of J. & E. Atkinson, of Old Bond Street, or that he is a relative or connection of any member of that firm, and from representing in any manner that perfumes made and sold by the defendant are manufactured by the plaintiffs' firm.

Judgment for the plaintiffs with costs accordingly.

"DRUGS" OR "CHEMICALS"—DOUGLAS STEAMSHIP CO.
v. W. CRUICKSHANK.

MR. A. J. LEACH, the acting Chief Justice, recently gave his decision in this case in the Supreme Court of Hong Kong. The plaintiffs sued the defendant, a chemist and druggist, for the sum of \$511.54 as damages resulting from the explosion of a parcel of drugs which he forwarded by the plaintiffs' steamship *Formosa*. The parcel was simply labelled "Glass with care," but there was no declaration of its contents, which were 2 oz. of boracic acid and 20 oz. of chlorate of potash in one glass bottle, 2 oz. of precipitated chalk and 20 oz. of chlorate of potash in another glass bottle, 3 drachms of copper oxide and 20 oz. of chlorate of potash in a third bottle, and $\frac{1}{2}$ lb. of flowers of sulphur in a paper wrapper. These substances were sent in response to an order from Swatow for "the necessary ingredients to make one green, one blue, and one red light (Bengal light)." The bottles were each carefully wrapped in corrugated paper and packed side by side in a row with the sulphur beyond them, but were all placed in one box. The parcel was stowed on board along with some boxes containing Christmas presents, and others containing blue lights, rockets, &c., used for signalling purposes. On the day after the *Formosa* left Hong Kong an explosion occurred in the mail-room, where the parcel was stowed, the result being that the mail-room was almost entirely destroyed, and the carpenter's room adjoining was in a similar condition. Three men were also severely injured. In his decision Mr. Justice Leach said that he could come to no other conclusion than that the explosion was caused by the contents of the parcel becoming mixed. He was also clearly of opinion that the defendant did not sufficiently declare the contents of the parcel. There was in the evidence some difference of opinion as to the proper definition of the word "drugs," which the parcel was said to contain; but it seemed to him that by using the word "drugs," the defendant or his assistant was using a misleading word, and that anybody with no special scientific knowledge would naturally infer from the word that what was meant was medicine. The contents of the parcel were to be used to compose coloured lights, that was, produce a chemical effect, or, to use Mr. W. B. Crow's definition, they were "substances which could play a part in chemical action," and therefore they ought, in compliance with the terms of the bill of lading, to have been described as chemicals, or their nature declared. Taking everything into consideration, and after reviewing similar cases in which legal points had been settled, Mr. Justice Leach decided for the plaintiffs, judgment being given for the plaintiff company for the amount claimed and costs.

SERVANT OR AGENT?

At the Manchester Assizes on Monday, before Mr. Justice Groutham, William Daniel Holbrook, commercial traveller, was indicted upon three charges of embezzling sums of money belonging to the Birmingham Vinegar Brewery Company, viz., 53*l.* 18*s.* 8*d.* on September 21, 1887, 38*l.* on October 21; and 30*l.* 11*s.* 6*d.* on November 16. Mr. Shee and Mr. Overend Evans were counsel for the prosecution, and Mr. McKeand appeared to defend. The prisoner was committed on a bench warrant issued by Mr. Justice Day charging him with having failed to appear at the last Liverpool Assizes. The real question at issue in the present trial was whether the prisoner was an agent or only a servant of the company, counsel pointing out that if he were an agent he could not be convicted in a criminal court if he stole 1,000*l.*, whereas if he were a servant he could be convicted in a criminal court if he stole 1*s.* Mr. John Leslie Thompson, manager of the Birmingham Vinegar Brewery Company, was examined with the view of proving that prisoner was only a

servant, and that he had appropriated various sums of money belonging to his employers. In cross-examination he admitted that in 1880 he knew the prisoner was connected with Messrs. Whitehead, Holbrook & Co., wholesale druggists, but that he was only connected with that firm as a sleeping partner. He did not know that the prisoner found all the money for that firm. He did not know that the prisoner was selling for the Birmingham Vinegar Brewery Company, was acting as agent for Messrs. Bishop & Co. and Messrs. Killingrey. Mr. McKeand, for the defence, said he was not there to contend that the prisoner had not put money into his pocket which would in the ordinary course of things have reached his masters. He did, however, contend that there was no proof on the part of the prosecution that the money ever was or was ever looked upon by them as their servant's instead of as an agent, as he (Mr. McKeand) suggested he was. If the jury came to the conclusion that he acted as an agent they would put the case out of court. He (Mr. McKeand) did not remember a case which was pursued with so much vindictiveness and such a determination to get a conviction at all hazards. They took the prisoner before Mr. Headlam, one of the most astute lawyers in Manchester, and he dismissed the case. Not content with that, with the same vindictiveness they took him to the Liverpool Assizes, a bench warrant was issued, and he was dragged up again. Even at these assizes it had been sought to remove him to some other place for trial. The agreement between the parties in this case was such as they never heard of between master and servant. Did they ever hear of a servant finding an office on his own responsibility and paying the rent and taxes? This man went farther, and sub-let a portion of the premises, and put the amount in his pocket, as he was entitled to do. As a matter of fact the Birmingham Vinegar Brewery Company was a rival of the Liverpool Vinegar Brewery Company, and it was only on the Liverpool Vinegar Brewery Company taking Holbrook in their employ in March last that the prosecution was proceeded with.

The Judge in summing up said that of course if a man had admittedly robbed his employers of 800*l.* or 900*l.* they could not well sympathise with him. He must say that he considered Mr. Thompson, the manager of the prosecuting company, had acted in a friendly way towards the prisoner, and had even run the risk of losing money over a transaction in which he had lent the prisoner money. It did seem strange that a delay should have occurred in taking the proceedings, and the dates seemed rather to bear out what had been suggested as to the motive for prosecuting the prisoner. At the same time, he thought it was bad taste on the part of a rival company, and conduct that ought not to be shown by one company to another, to take a man into their employment who had robbed his employers in order that they might get a good deal of the trade connection of the old employer. The Judge pointed to the agreement between the prisoner and the prosecuting company as to the payment of commission instead of salary to the prisoner, and to the passages in which the words "agent" and "agency" occurred. There was no doubt the prisoner had behaved dishonestly towards his employers. That, however, was not the question before them. They had to be guided by strict law as well as strict justice, and they had to say whether or not the prisoner was treated as a servant, and was so brought into the meshes of the law.

The jury found the prisoner not guilty, and he was discharged.

Personalities.

MESSRS. SWIRE & Co., of Brixton Hill, have disposed of their branch shop at 137 Cornwall Road, Brixton, to Mr. F. P. Parker.

MR. E. N. RIDLEY has opened a new pharmacy at 6 Commercial Terrace, Streatham Common.

MR. W. C. PLUMER has purchased the old-established business of Messrs. Yarde & Dalton, at 28 Lamb's Conduit Street.

MR. HORNSEY has purchased the business of Mr. W. C. Plumer, at 193 Queen's Road, Peckham.

Gazette.

PARTNERSHIPS DISSOLVED.

ooke, C. G., & Taylor, S., Birmingham, wholesale chemists.

les & Taylor, Braebridge, Lincolnshire, aerated and fermented water and beer manufacturers.

dskinson, J., & Co., Blackburn, mineral water manufacturers.

arn & Watts, Highgate Road, and Fortress Road, Kentish Town, N., surgeons and general medical practitioners.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

ker, Alfred, jun., Regent Street, W., chemist.

ayton, William, late of Hammersmith Road, now of King Street, Hammersmith, doctor of medicine.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

gland, John, Higher Broughton, Salford, mineral water manufacturer—July 26, Official Receiver's Offices, Manchester; July 30, Court House, Salford.

cks, Rivers (trading as François Le Mair & Rivers Hicks), Savage Gardens, Tower Hill, City, and Highbury Terrace, Islington, Indian and general merchant—July 24, Bankruptcy Buildings, Portugal Street, Lincoln's Inn Fields; Aug. 3, 34 Lincoln's Inn Fields.

ADJUDICATION.

ayton, William, late of Hammersmith Road, now of King Street, Hammersmith, doctor of medicine.

NOTICE OF DIVIDEND.

ward, W. Clement, St. Stephen's Square, Westbourne Park, late of Brixton Rise, Brixton, doctor—first and final div. of 3s. 6½d., any day except Saturday, Chief Official Receiver's offices, 33 Carey Street, Lincoln's Inn.

APPLICATIONS FOR DEBTORS' DISCHARGE.

aw, Thomas, Colwyn Bay, Denbighshire, physician and surgeon—Sept. 10, Court House, Bangor.

seath, Robert Dixon, Newark, chemist and druggist—Aug. 14, Nottingham.

SCOTCH BANKRUPT.

DIVIDEND.

editors of Robert Park, doctor of medicine, 52 St. Enoch Square, Glasgow, will receive a dividend August 28, in the counting-house of J. Martin, 133 West George Street, Glasgow.

FAILURES AND BANKRUPTCY REPORTS.

JOSEPH BLACKBURN LESLIE (trading as Leslie & Co.) 60 Trippett Lane, Sheffield, Wholesale and Retail Chemist and Druggist.

A MEETING of the creditors of this debtor was held in the offices of the Official Receiver, Sheffield, on July 12. The Official Receiver stated that the debtor commenced business in 1859 in Broomhall Street, with a capital of about 200*l*. In 1874 he sold this business for 400*l*., and bought his father's business in Trippett Lane, for which he paid 400*l*., and he had to pay an additional 300*l*., and did so in 1876. He had kept a daybook and ledger, but no cash book. The debtor stated that at the time he took the business in Trippett Lane he had from 800*l*. to 900*l*. in hand, but he attributed his insolvency to losses by bad debts. Between 1876 and 1880 he lost about 200*l*., and since that time his losses had reached about 500*l*. He had never accurately taken stock, but at the end of 1885 he made a rough calculation, but could not supply any particulars respecting it. His deficiency was fully accounted for by the bad debts. The debtor did not make any offer, and the Official Receiver doubted whether the assets would realise the bankrupt's estimate. The statement of affairs showed unsecured creditors to the amount of 4*l*. 14s. 7*d*.; stock-in-trade, fixtures, furniture, &c. (which at 400*l*.), estimated to produce 240*l*.; book debts which were

considered good 105*l*. 4s. 2*d*., and bad and doubtful 555*l*., estimated to realise 64*l*. 19s. 6*d*. The debtor had some property which was mortgaged for 1,000*l*. The property was valued at 1,393*l*., and after being realised was estimated to leave a balance of 393*l*. 15s. This showed total assets 806*l*. 12s. 8*d*., less 9*l*. for preferential creditors, leaving 797*l*. 18s. 8*d*., to meet the liabilities, which were 984*l*. 14s. 7*d*. This showed a deficiency of 186*l*. 16s. 1*d*. The Official Receiver had appointed the debtor as manager of the business until some arrangement was come to. In answer to questions the debtor said he did not really know he was insolvent until about three months ago.

Re W. J. BARNES, THE ATLAS CHEMICAL WORKS, RAINHAM.

At the County Court, Chelmsford, last week, Mr. Brighten, solicitor, applied for the discharge of this bankrupt. The Official Receiver's report stated that the debts amounted to 3,240*l*. 13s., while the assets were *nil*. The bankrupt had continued to trade after knowledge of insolvency. There were no trade creditors claiming against the estate, the only creditor of any importance being W. J. Barnes, the father, for 2,043*l*. 15s. 6*d*., which was incurred by his paying off the trade debts for the bankrupt. The bankrupt had signed accommodation bills amounting to 1,142*l*. 10s. for a man named Wallace, his only consideration being one sum of 75*l*. His honour suspended the discharge for two months.

RIVERS HICKS (trading as François Le Mair & Rivers Hicks), 5 Savage Gardens, Tower Hill, and 15 Highbury Terrace, Islington, Indian and General Merchant.

THE summary of the accounts under this failure has been issued, together with the Official Receiver's observations, by which it appears that the receiving order was made on June 29 last. The gross liabilities amount to 11,372*l*. 4s. 3*d*., and are made up as follows, viz.:—Creditors unsecured, 4,918*l*. 4s.; fully secured creditors, 1,965*l*. (the estimated value of the securities being given at 3,270*l*.); partly secured creditors, 3,392*l*. 2s. 11*d*. (these creditors holding securities valued at 2,230*l*.); other liabilities expected to rank against the estate, 331*l*. 5s.; liabilities on bills other than the debtor's own acceptances, 736*l*. 17s. 4*d*., but not expected to rank against the estate; and a preferential creditor, for wages, 8*l*. 15s. The total amount expected to rank against the estate is 6,411*l*. 11s. 11*d*., and the assets are estimated to produce 5,816*l*. 0s. 10*d*., after deducting the preferential claim. They consist of cash, 74*l*.; stock-in-trade, bark, and tea, at various London docks (estimated cost, 2,964*l*.), expected to realise 1,484*l*.; household furniture, valued at 200*l*.; other property, consisting of shares, &c. (estimated cost, 3,400*l*.), expected to realise 2,210*l*.; good book debts, set down at 571*l*. 15s. 10*d*.; and the estimated surplus from the securities held by creditors fully secured, 1,285*l*. The deficiency, therefore, is 595*l*. 11s. 1*d*. The Official Receiver reports that the debtor states that in 1877 he was admitted into partnership by his former employer, Mr. Le Mair, on paying in capital amounting to 2,000*l*.; that his partner retired in 1882, and the debtor agreed to pay him 3,000*l*., as representing Mr. Le Mair's share of the goodwill, of which 1,800*l*. has since been paid, and the balance, 1,200*l*., with interest thereon, is now owing to the widow, as executrix of his late partner, whose claim is included in the creditors partly secured; also that there is another debt outstanding in respect of this partnership, amounting to 300*l*., included in the creditors unsecured. The debtor attributes his failure mainly to his inability to realise his shares in a bark-producing estate in India; and he explains the loss of his capital and the deficiency shown on his statement of affairs by losses on trading since June, 1885, also by depreciation in the value of his stock-in-trade, shares, &c., as estimated for realisation. The creditors unsecured include the claims of the debtor's father for money lent in 1882, and interest thereon, amounting to 3,225*l*. The securities held by creditors treated as secured are stated to be mortgages on leasehold property at King's Head Yard, Wilmer Gardens, and Kingsland Road, estimated by the debtor at the value of 2,000*l*.; transfers of 11,000 fully-paid 1*l*. shares in a bark-producing estate in India, estimated at 3,300*l*.; a life policy for 1,500*l*., estimated at 150*l*.; and office furniture, 50*l*. The item, "Other

property," is stated to consist of further shares in bark-producing estate companies, estimated by the debtor, for the purpose of his statement of affairs, at 2,060*l.*; also another life policy for 1,500*l.*, estimated by him at 150*l.* The following are the principal creditors:—

Unsecured.

	£	s.	d.
Hicks, H., Weybridge	3,225	0	0
Lemair, G. I., Paris	864	0	0
Money, I. W. B., Madras	240	0	0
Henley, A., Bageralstown	220	0	0
Melvor, Mrs., Madras	82	0	0
Hicks, F., Cornwall Terrace, W.	50	0	0
Stannard, C. J., Mark Lane	50	0	0
London & St. Katharine Dock Company	75	19	0
Dufour frères, Geneva	30	0	0
Groom, C., near Margate	16	5	0
Bishop & Co., Pimlico	10	13	6
Abeniacar & Nunefiori, Naples	10	0	0

Fully secured.

Barcham, W., Norwich	820	0	0
London & Joint Stock Bank	1,115	0	0
Verry, W., Seething Lane	50	0	0

Partly secured.

Hicks, F., Cornwall Terrace, W.	1,575	0	0
Lemair, Mrs., Ramsgate	1,230	0	0
Burkitt, H., London Wall	557	2	11

Liabilities.

Barcham, Mrs., Norwich	250	0	0
Wallace, H., Merton	65	0	0
Groom, C., near Margate	16	5	0

Trade Notes.

MR. JUSTICE STIRLING last Saturday made an order for the winding-up of the Montserrat and Antilles Produce Company (Limited).

It is reported that the patents of the Cyclone Pulveriser for France, Italy, and Belgium have been sold for 40,000*l.* to a French syndicate.

By a recent decision of the French Government, the importation into France of the British medicinal compounds, "Hippacea" and King's Hop Bitters, is prohibited.

THE French Customs have decided that certain of the manufactures of Seabury & Johnson, of New York, will pay specific duties on importation into France equivalent to an *ad valorem* rate of 10 per cent.

AT the meeting of the Sanitary Institute of Great Britain held in the Royal Institution on Thursday, July 12, a first prize medal was awarded to Messrs. Burroughs, Wellcome & Co. "for digestive ferments and invalid food preparations."

COCA WINE.—Messrs. Armbrrecht, Nelson & Co., of Duke Street, Grosvenor Square, inform us that the Board of Inland Revenue have decided to class their widely-known coca wine among beverages, and to relieve it from medicine-stamp duty. Hence only traders holding a retail wine licence will be able to sell it.

MEXICAN PULQUE.—Mr. James Clark, of Edinburgh, has received a letter from Somerset House informing him that "the Board of Inland Revenue have decided not to interfere with the sale of this article so long as it is duly stamped with a medicine label, and sold under a stamped-medicine vendor's licence."

CHEMICAL MANUFACTURERS in New England and Canada will notice by an advertisement appearing in the supplement that the Copperfield Mining and Smelting Company, West Fairlee, Vermont, U.S.A., have recently erected a new mechanical roaster, which produces sulphurous gases that might with advantage be utilised by chemical manufacturers.

MESSRS. LEHN & FINK, New York, are issuing in pamphlet form the very complete list of popular German names of medicines compiled by Dr. F. Hoffmann, and which has

recently appeared in the *Pharmaceutische Rundschau*. They promise to send a copy of it to anyone who sends them a 2-cent stamp. Those who do not have that rarity might try the effect of a 1*l.* stamp.

A NEW edition of the Extra Pharmacopœia appears to-day. It contains about 150 new notes on articles which have come into use or have grown in therapeutical importance since the fourth edition was published. Besides these the references have been added to, and the Pharmacopœia as a whole thoroughly revised. Mr. Martindale still retains the assistance of Dr. Wynn Westcott in the therapeutical department. Mr. H. K. Lewis is the publisher.

JEYES' DISINFECTANT.—The proprietors of this preparation are now placing on the market a large number of articles of which it forms the basis. The disinfectant itself is a thickish brown liquid of phenol-like odour, which mixes readily with water. A similar substance under another name has, it is well known, been lately introduced in Germany, and appears to be creating great interest among medical men there, who extol it highly on account of its antiseptic and antipyretic properties. The claims set forth for the English preparation are more modest, but they show that it is an active antiseptic and disinfectant. Jeyes' Sanitary Compounds Company have combined the preparation with soaps (household, toilet, and dog soaps) for cleansing purposes, white and brown soft soaps being also made, while in liquid and powder forms it is made applicable for the purpose of general disinfection, the whole being classed under the title "Perfect Purifier." The preparations are non-poisonous.

MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

LOWE—SYMONDS.—On July 17, at Edgbaston parish church, by the Rev. J. Stockdale, M.A., vicar of Baslow and rural dean of Eyam, uncle of the bridegroom, Henry Burman, eldest son of Henry Lowe, of Southfield, Edgbaston (of the firm of Philip Harris & Co., Birmingham), to Florence Mary, eldest daughter of the late Henry Symonds, of Claremont, Edgbaston.

PAYNE—TURNER.—On June 18, at St. Paul's Church, Marylebone, William Payne, chemist, of The Broadway, Chesham, to Alice Elizabeth Amery, only daughter of Mr. John Turner, chemist, of 16 Market Square, and "The Limes," Aylesbury.

YOUNG—DUTTON.—On July 12, at Trinity Chapel, Southport, by the Rev. S. Whitehead, J. Rymer Young, of Warrington, to Marie, eldest daughter of William Dutton, Arley, Birkdale, Southport.

DEATHS.

ABEL.—On July 14, at 62 Market Place, Inverurie, Mr. William Abel, chemist and druggist. Aged 67.

HOOSON.—Mr. Edward Hooson, chemist and druggist Stanhope, near Darlington, died suddenly on July 9 from paralysis. Deceased, who was in his 60th year, was going about as usual on the Sunday previous.

JENSEN.—The death, in New York, is announced of Mr. Carl L. Jensen, the well-known manufacturer of pepsin. Mr. Jensen was a native of Norway, where he was born in 1845, and graduated as a pharmacist in Copenhagen. In 1869 he emigrated to the States, and opened a drug store in Chicago, but lost all he had in the great fire of that city. He went to Dakota, and shortly afterwards began the manufacture of pepsin; later he removed to Philadelphia, and continued the business on a larger scale. The immediate cause of Mr. Jensen's death was typhoid fever. He leaves a widow and three children.

KEMP.—At No 7 Lee Crescent, Portobello, on July 16, Mr. David Kemp, pharmaceutical chemist, Portobello, and co-pastor of Bristo Place Baptist Church, Edinburgh, aged 72. Mr. Kemp withdrew from public pharmaceutical work about seven years ago, but previous to that he had for many years been justly regarded as one of the leaders of pharmacy in the North. He was brought up in the establishment of Duncan, Flockhart & Co., Edinburgh, and left it about the year 1849,

on acquiring a business in Portobello, which he conducted until his retirement a year ago. He was early appointed a member of the Board of Examiners for Scotland, and the duties of this office he conducted in a remarkably kind-hearted manner. He was also for many years a member of the Council of the North British Branch, and occupied the presidential chair of that body for several sessions, and the energies of his prime also received an outlet in occupation of municipal offices, and until his death he took an active share in the pastorate of the Bristol Place Baptist church. In every position in which he was placed Mr. Kemp was a man whose character was greatly respected, and whose judgment was highly valued. He was characterised by an inflexible integrity, and at the same time by a wonderful simplicity and gentleness, and he was possessed of a remarkable gift of utterance, always saying exactly what he meant to say, and that in the most incisive and convincing manner. Altogether Mr. Kemp's was a notable personality, and his death will stir regrets amongst his old friends by whom he was highly respected and loved.

LARMER.—At Sydney, N.S.W., on May 18, Mr. W. Larmer, pharmaceutical chemist, aged 72 years. Mr. Larmer was one of the best-known pharmacists of Sydney, and was highly respected by his fellow members of the Pharmaceutical Society of New South Wales, of which he was president for three years—from 1884 to 1886; he also acted as an examiner for the society. Mr. Larmer left Croydon, Surrey, for New South Wales in 1850, and returned to this country in 1859. But after a stay of four or five years again went back to Sydney, and resumed business in George Street there, which he carried on successfully until his death.

THOMPSON.—On July 17, 1888, at his residence, Sunninghill Road, St. John's, Mr. Henry Thompson, for thirty-five years the much-esteemed and energetic representative of Messrs. Meggeson & Co., Miles Lane, E.C.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.C.

From the "Trade Marks Journal," July 4.

- "THERMO-SAFEGUARD," and signature of depositors; for feeding-bottles. By Pocock, Keevil & Co., 72-74 Wandsworth Road, Vauxhall, S.W. 65,554.
- "EDWARD & Co.," for edible oils, spices, baking-powder and other substances (Class 42). By Edward Pink & Sons, Staple Street, Long Lane, Borough. 68,684.
- "WHITE HEATHER," and other wording, on fancy label; for perfumery. By The Leith Depot (Limited), Leith. 68,798.
- "PUBLIC HEALTH SOAP FOR TOILET," on fancy label; for perfumed, medicated, and common soaps. By W. Bolton (trading as The Health Soap Company), Bootle. 68,877-9.
- "THOPIENOGE," and other wording, on label; for a Russian preparation for softening, waterproofing, and protecting leather, boots, and the like. By P. Beale, Ashton Cottage, Blackrock Road, Cork. 71,350.
- "CHILDREN IMPORTUNATE FOR IT!!! RICHARDSON'S COD LIVER OIL EMULSION," and figure of mother and child, the latter crying "More, mamma, more"; for chemical substances (Class 3); the same without the words "Cod Liver Oil Emulsion," for substances used as food (Class 42). By John Richardson & Co., Friar Lane, Leicester. 71,435-6.

Figure of a fish, and "the fish brand"; for caustic soda. By Bessler, Waechter & Co., 123 Bishopsgate Street Within, E.C. 72,449.

"W. E. COOPER'S RHENO," and signature; for a medicine, including pills, for rheumatism. By W. E. Cooper & Co, 599 Commercial Road, E. 72,665.

"OMNISTIC"; for adhesive preparations. By F. Rosenthal, 17 South Street, Finsbury, E.C. 72,839.

"PURE EXTRACT OF ENGLISH LAVENDER FLOWERS," other wording, and figure of a field of lavender; for lavender perfumery. By Perks & Llewellyn, Hitchin. 72,885.

"STONE BREWED GINGER ALE," and other wording, on fancy label. By Duckworth & Wright, Oldham. 73,242.

"BUNTER'S DENTINE"; for a preparation for stopping teeth. By Alfred Wilson, 422 Clapham Road, S.W. 73,415.

"HILLABY'S LIQUORICE WAFERS"; for confection. By John Hillaby, Tanshelf, Pontefract. 73,654.

"FELLS' RHEUMI OIL"; for medicinal oils. By Robert Owens (trading as Fells'), 144 London Road, Manchester. 73,710.

"DEARDEN'S GERM KILLER"; for a disinfectant. By W. Dearden & Son, Pocket Street, Pike's Lane, Bolton. 73,890.

"PELLOID"; for a medicine for human use. By Thomas O. Sandell, 1 Baron's Court Road, West Kensington. 74,009.

"IVORINE"; for perfumery. By Zeno & Co, 16 Rathbone Place, W. 74,094.

"J. E. MARSDEN'S RESTAURO PILLS" (in script); for medicine. By J. E. Marsden, 63 St. Paul's Churchyard, E.C. 74,144.

"WINTER'S DIARRHOTINE," and other wording; for a medicine for the cure of diarrhoea. By T. S. Winter, surveyor and builder, Westoe Road, South Shields. 74,250.

"P. JAMIESON, ABERDEEN"; for harness polish. By P. Jamieson, 8 South College Street, Aberdeen. 74,393.

"THE WILLESSEN LIVER CURE"; for pills. By M. Richards, Claremont, Moseley, Birmingham. 74,568.

"CAPITINE"; for a preparation for the hair. By H. Bell, 62 Quay, Waterford. 75,097.

"SPARKLING MOSCATEL," on label; for a non-alcoholic aerated beverage. By Stevenson & Howell, 95A Southwark Street, S.E. 75,813.

From the "Trade Marks Journal," July 11.

"HAYWARD'S POWDER SHEEP DIP," and other wording, on label; for sheep dip. By Tomlinson & Hayward, Lincoln. 65,297.

"LEA & PERRINS' WORCESTERSHIRE SAUCE," "Lea & Perrins," signature of the depositors on engraved band label, and "Directions for using Lea & Perrins' Worcestershire Sauce," with other wording, on label; for a sauce. By Lea & Perrins, Worcester. 65,838-40, 67,937.

"VAN HOUTEN'S PURE SOLUBLE COCOA," and other wording (apparently intended for embossing on canister lids); for cocoa and chocolate. By C. J. van Houten & Zoon, Weesp, Holland. 67,807.

"STEPHENSON BROS.' SUPERIOR FURNITURE CREAM," and other wording, on fancy label; for furniture cream. By G. B. Stephenson and G. Speight, trading as Stephenson Bros., Bradford. 69,890.

Cross over orb; for medicinal pastilles and natural mineral waters. By the Soden Mineral Produce Company, 10 Dyer's Buildings, Holborn, E.C. 69,901.

"NEILSON'S REGINA LOTION," and a signature; for a lotion for human use. By Jemima J. E. Hedderwick, 22 Ladbroke Square, W. 70,068.

"RÉGINA"; for perfumery. By Lecaron-Gellé, trading as Gellé Frères, 6 Avenue de l'Opéra, Paris. 70,074.

"Ness's ROYAL DEVONSHIRE BOUQUET," and other wording, on fancy label; for a perfume. By T. H. Ness, chemist Torquay. 70,287.

- "NORMAN'S 'FESTERKLOZ' OINTMENT"; for an ointment. By J. S. Norman, 70 Tavistock Street, Bedford. 70,647.
- "SPT. CHLOROFORMI," and other wording, on slip label with name of the depositors printed diagonally across; for medicinal preparations. By John Richardson & Co., Leicester. 71,434.
- "CARDEOLINE"; for a medicine for human use. By the "Enaline" Company, Milford. 72,072.
- "SCHWEPPE'S SPARKLING MALVERN," and other wording, printed over a fountain upon a label; for natural waters (aërated). By J. Schweppe & Co. (Limited), 51 Berners Street, London, and elsewhere. 72,108. Also "Sparkling Malvern" over a fountain, and "Schweppe's Sparkling Malvern Water," for mineral and aërated waters. 73,836-7.
- "JUDSON'S ART ENAMEL PAINTS"; for art enamels. By D. Judson & Son, Southwark Street, S.E. 72,155.
- "REDMOND'S LONDON STOMACH WASH AND LIVER CORRECTOR"; for a medicine. By L. Redmond, 96 Lower Gardiner Street, Dublin. 72,212.
- "MARKING INK," figure of a lion, and other wording, on label; for marking-ink for linen. By H. Lyons and J. Lyons, trading as W. Lyons, Park Street, Cheetham, Manchester. 72,518.
- "NORMAN'S 'PHENIRIDINE' POWDER"; for a powder for the cure of sweating feet. By J. S. Norman, Bedford. 72,765.
- "EASY'S POLISHING PASTE, Easy's Furniture Polish, Easy's Pipe Clay, Easy's Tailors' Chalk, Easy's Plate Powder, Easy's Knife Polish," as advertisement of the respective articles. By Easy & Co., Hanley. 73,884.
- "TRANSPARENT FURNITURE POLISH," and other wording, on figure of a case; for furniture polish. By E. J. Hughes, Victoria Street, Manchester. 74,104.
- "JANOS," and other wording, on label; for natural mineral waters. By A. Saxlehner, Budapest. 74,186.
- "BUCKROSE PILLS," and signature; for pills. By J. Meek, perfumer, Market Place, Driffield. 74,445.
- "LACEY'S," and a portrait; for pills and other medicines. By R. Lacey, Thetford. 74,732.
- Device, circle with square in centre bearing figure of a measure-glass, and a motto; for chemical substances. By W. H. Wilkinson, Commercial Buildings, Normanton. 75,408.
- "ADAMS BROS' CLEANING COMPOUND"; for a compound for removing stains, &c. By Adams Bros, 111 Clarence Road, Clapton. 75,337.

A GENERAL APERIENT.

THE following is being prescribed pretty frequently by Dr. Horace Dobell for the purpose of establishing a regular and complete action of the liver and of the whole alimentary tract:—

Ext. cascaræ sagrada	gr. iij.
(Made by evaporating gr. xij. of liquid aqueous extract down to gr. iij.)	
Ext. rhei	gr. ij.
Jalapini	gr. j.
Podophyllin	gr. $\frac{3}{4}$
Cocaine hydroch.	gr. $\frac{1}{2}$
Olei caryoph.	℥ $\frac{1}{2}$
Glycerini	℥ v.
Sp. vini rect. ad	3ss.

Dissolve carefully and filter.

The dose being only from 10 to 60 minims, it is most convenient in practice, especially if dispensed in graduated tubes, so as not to require a measure-glass. As it contains only vegetable matters, and has restorative properties, it may

be taken daily for any length of time with advantage to the general health and tone of the system.

Dr. Dobell generally prescribes from 10 to 20 minims in two tablespoonfuls of "Carnrick's liquid peptonoids," or of Hanbury's "Bryn," thus increasing its tonic and restorative influence; but it may also be taken in a wineglassful of water if preferred.

In those with whom aperients act promptly the best time to take this remedy is one hour before breakfast, when it should be followed by half a tumblerful of hot water or tea. In those with whom aperients act slowly it may be taken at bedtime. For adults, when a potent aperient is required only now and then, 30 to 60 minims may be taken. But when required daily, or every other day, from 10 to 20 minims are sufficient. For children, to whom it is easily administered, and well suited, the dose must be adjusted to the age.

Independent of the mere action of the bowels, the great importance of keeping up the eliminative functions of the liver and whole alimentary tract is well shown in the following passage from Dr. Quain's "Dictionary of Medicine." Under the head of "Functional Disorders of the Liver," the writer says he "quite concurs with, and will concisely state the views advanced by, Dr. Murchison. One of the immediate results of such faulty function is the non-conversion of nitrogenous matter into urea and the production of lithates and lithic acid, inducing a condition of blood to which this authority fitly applied the term 'Lithæmia.' . . . After a time the excessive quantity of lithic acid and lithates cannot be eliminated by the kidneys, and they accumulate, causing disturbances in different parts of the organism and giving rise to various more or less distressing symptoms. Of these symptoms the more prominent are:—Epigastric oppression, flatulent distention of stomach and bowels, heartburn and acid eructations, sense of weariness and tendency to sleep after meals, furred tongue, unpleasant taste in the mouth, especially in the morning, appetite often good, sometimes the contrary, an excessive secretion of viscid mucus in the fauces and back of the nose, constipation and vitiated secretions, palpitation, irregular and intermittent pulse, frontal headache, vertigo, noises in the ears, sleeplessness at night, irritability of temper, and hypochondriasis are other symptoms that are not infrequently present. Gout, whether openly expressed, latent, or irregular, is associated with the symptoms just mentioned, and is one of the results of lithæmia and of faulty hepatic function. . . . Urinary calculi are another result of lithæmia. . . . Sir Henry Thompson confirms this view. . . . Bilious calculi are also a result of functional hepatic derangement. . . . Lithæmia disposes to local inflammations. . . . Some diseases of the skin, such as eczema, psoriasis, lichen, and urticaria, are unquestionably often induced and maintained by lithæmia and the hepatic derangement from which it results."

In the third edition of Dr. Dobell's work on "Loss of Weight, and on the Functions and Disorders of the Liver," after explaining the important rôle played by the liver in the organism, he says:—"There is no doubt, therefore, that we are theoretically right in following the course which *practical experience* has most unquestionably dictated and justified, viz., to maintain, by every means in our power, the full integrity of all the functions of the liver. . . . In this way gouty and rheumatic affections and their attendant dyspepsia may be far more permanently treated . . . than by merely resorting to antidotes for the over-acid condition." And in the seventh edition of his work "On Diet and Regimen in Sickness and Health, and on the Prevention of Disease and the Diminution of its Fatality," Dr. Dobell says:—"As a general rule the bowels ought to act at some stated time once in every twenty-four hours; and it is best to accustom them to act in the morning after breakfast. If they do not act spontaneously they should be assisted by some harmless aperient. . . . Provided that an aperient is suited to the case and contains no drug injurious to the general health, there is no harm in taking it at night, or in the early morning, whenever the bowels have not acted satisfactorily during the preceding twenty-four hours. It is a great mistake to load the bowels with fruits and vegetables in order to avoid taking some harmless aperient medicine."

The prescription which we have copied above so completely represents what Dr. Dobell calls a "harmless aperient medicine" that we feel we are doing a service to our readers by thus prominently bringing it to their attention.

SOME DRUGGISTS' SPECIALITIES

Mutual assistance for this department, which is a standing feature of THE CHEMIST AND DRUGGIST, is invited from generous pharmacists.

Tontheche Pills.

	Grains
P. res. guaiaci	20
P. cort. canella	10
Ext. aloes aqros.	30
Pulv. cinnam. co.	10
„ sapo. cast.	10

M. Ft. mass.; div. in pil. 20.

One, two, or three may be taken at bedtime, or, if the pain be very violent, one or two may be taken at any time during the day and repeated at bedtime.

ANON. (30/12.)

Floral Cologne Water.

Oil of bergamot	2 oz.
„ orange peel (sweet)	1 „
„ lemon	1 „
„ lavender	6 drachms
Extract of orange flower	32 oz.
„ musk	½ „
„ jasmirine	½ „
„ orris	16 „
Alcohol	96 „

Druggists' Circular.

Chemists are often asked for an agreeable aperient for young children, which shall not gripe. In such cases they might sell a

Children's Pleasant Aperient,

for which the following is the formula:—

Tinct. sennæ	3ij.
Ext. cascarr. sagrad. liq.	3iss.
Ess. anisi	3ss.
„ menth. pip.	3j.
Ol. gaultheriæ	℥iv.
Sod. pot. tart.	3j.
Sod. bicarb.	3j.
Sacchari	3iv.
Aquæ	3ij.

M.

Dose.—One teaspoonful and upwards, according to age.

To be put up in 3-oz. thick panelled bottles (hold 2 oz.), wrapped in blue enamelled paper. Retail at 1s.

For “children of a larger growth,” the following will be found useful as a substitute for castor oil, Epsom salts, or pills:—

Cathartic Elixir.

Mag. sulph.	3xxx.
Fol. sennæ	3vij.
Podophyll. res.	3j.
Glycyrrhizæ	3xxx.
Pulv. zingib.	3iiss.
Cort. rhamn.	3xv.
Aquæ bull.	3xv.
Elixir aromatic	ad 3xxx.

Macerate solid ingredients in the water for four days, strain and filter. Then add the elixir, aromat.

In 4-oz. oval bottles, neatly labelled; not to be wrapped.

There is an opening for an effervescing saline, which, besides being cooling and mildly aperient, shall also possess tonic properties, thereby reducing its lowering effect to a minimum. A chemist can advertise his own preparation as being thus constituted, if to any ordinary saline he adds with care a small quantity of the *Essential Oil of Hops*. A

few drops will impart a powerful flavour of hops to several pounds of the mixture. This should be labelled “Tonic Saline,” or some similar title. We believe the title “Hop Saline” is registered as a trade-mark.

Chemists who are also mineral-water manufacturers will find it pay to introduce novelties in that department of their business. A suggestion in this direction may here be made.

Eau Moselle.

(A Temperance Hock.)

To ordinary aerated water add a mixture of syrup of lemons (true), Angostura bitters, and essence of vanilla. The quantities can be determined by one or two experiments. This should be put up in pint and quart champagne bottles, and finished off in good style.

Pharmacists residing in low and damp districts may easily obtain a local reputation for curing ague and premonitory malarial fever. The following formula is most extensively used in the swampy districts of the Southern States of America. It is somewhat complicated, but yields a good profit:—

Quinine	3x.
Quinidine	3iv.
Cinchonidine	3j.
Cinchonine	3j.
Podophyllin	3j.
Rad. rhei	3x.
Caryophyll.	3iiss.
Cinnamom	3x.
Rad. zingib.	3x.
Acid. sulph. arom.	3vij.
Syrup et aq. (p. aq.)	ad 3 250

Macerate rheum, podoph., caryoph., and cinnam. in aq. for four days; strain and filter. Dissolve bark salts in acid and mix with other ingredients.

Dose.—One tablespoonful every three or four hours, until symptoms abate. In 8-oz. panelled bottles, cased and wrapped. Sells at 1s. 9d. to 2s. 6d.

Chemists seem to have a strange dislike to leaving the old lines in regard to cough mixtures. The black, syrupy mixture, tasting principally of aniseed, usually forms the stock proprietary article of the average retailer. By way of variety the following is presented:—

Chlorodyne Cough Cure.

Tinct. toltan.	3iv.
Tinct. lobel. æth.	3ij.
Tinct. cannab. ind.	3ij.
Chloroform.	3j.
Morph. acet.	gr. iv.
Antim. tart.	gr. iv.
Ess. menth. pip.	℥x.
Syrup. simpl.	3xvj.

M. Dose.—One teaspoonful. Not suitable for infants.

This makes a mixture pleasing in appearance, agreeable to the taste, and efficacious in its action. Should be put up in white 2, 4, and 8 oz. square bottles, with small label, so as to show off the contents.

The next article to be referred to should commend itself particularly to pharmacists in well-to-do districts. It is an ideal pick-me-up and appetiser, and entirely devoid of any suggestion of “physic.”

Liqueur Bitters.

Quinine sulph.	gr. xxiv.
Liq. strychninæ	5iiss.
Sp. vin. rect.	5j.
Tinct. limonis	5ij.
„ aur. recent.	5ij.
Syr. et aq. (part. aq.)	ad 3vj.
Tinct. croci	q.s.

Should be filtered until perfectly bright, enough tr. croci being added to produce a golden colour.

Bottle in 6-oz. liqueur squares; cap with parchment, and affix green seal. Sell at 2s. 6d. or 3s. The dose is one tablespoonful, to be taken as a liqueur.

TRADE **"SANITAS"** MARK.
DISINFECTANTS

(FLUIDS, POWDER, SOAPS),
 NON-POISONOUS, PLEASANT, AND BEST.
 Gold Medals, Calcutta 1883-84. Paris 1885, Antwerp 1886.

KINGZETT'S BACTERICIDES

Particulars sent on application to

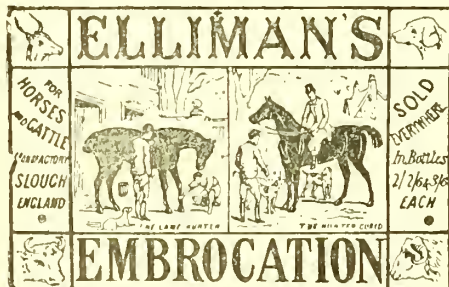
THE "SANITAS" COMPANY, LIMITED,
 Letchford's Buildings, Bethnal Green, London.

SECURUS JUDICATOR BISTERRARUM

Apollinaris
 "THE QUEEN OF TABLE WATERS."

The filling at the Apollinaris Spring during
 the year 1887 amounted to
11,894,000 Bottles.

SHOW CARDS, 24×17 or 17×12,



Free to any Address.

SILICATED CARBON FILTERS
AERATED

PATENT MOVABLE BLOCK.

See Advertisement, page 16 (bottom folio).

Protected by



Royal Letters Patent

SALT REGAL

In bottles hermetically sealed. 2/6 Regularly stocked by Wholesale Houses.
 Usual Trade Terms. Sole Proprietors—

FRITZ & CO., Salt Regal Works, Fleet St., LIVERPOOL.

MUMFORD'S
PURE FULLERS EARTH

Fine-st powdered, in 56-lb. and 1-cwt. bags, 14s. per cwt.; in 7, 14, and 28 lb. bags, 16s. per cwt. net. Bags included, delivered free in London. Samples post free.

G. S. MUMFORD, STEAM MILLS, FARRINGTON ROAD, LONDON, E.C.

Do you make your Tinctures and Infusions with Fletcher's New Liquors? If not, send to the Manufacturers for a Trial Sample.

EDITORIAL NOTES.

THE SELLER OF POISONS.

SINCE we wrote under this title three weeks since the law as to the responsibility attaching to the actual seller of scheduled poisons has been again declared in a Scottish Court. This particular decision, it appears, is to be appealed against; on what grounds exactly we are not at present informed. We will, however, assume that there is still a doubt as to who is the actual seller, and must wait till the High Court of Justiciary of Scotland has pronounced an opinion before we can be quite assured; but if the result should be to establish the dicta of the English law lords, that the sale of poison in a chemist's shop may be conducted only by qualified persons, whether their employers be chemists or doctors or limited companies, the duty of the Pharmaceutical Council will be clear. The administration of the Pharmacy Act is entrusted to them; the object of that Act was not to promote the prosperity of the trade, nor that of the Pharmaceutical Society, but to protect the public from the obvious dangers arising from the dealing in deadly poisons by incompetent persons; and so far the Pharmaceutical Council have done almost nothing towards enforcing the provision which would most effectively secure to the public the protection desired.

When we last wrote on this subject we had to comment on a case of poisoning occasioned by the extraordinary incompetence of a young man who had in his charge poisons enough to destroy a parish, and so little discretion, apparently, that the parish was in serious danger. Now the Act of Parliament rendered that young man liable to a penalty of five pounds every time he sold any of these poisons; and the public have a fair right to expect that, such an Act having been in force for twenty years, they may rely that generally if they enter a chemist's shop they will be served by some one who has been proved to be fit for the responsibilities he has assumed. As a matter of fact, they can rely on nothing of the sort. The Pharmaceutical Council have never attempted to enforce the provision on behalf of the public; the Hamilton case last week was, we believe, the first instance when they have appealed to it in prosecuting an assistant, and then it was obvious that trade interests were at stake. On previous occasions when Courts have declared the actual seller to be personally responsible, the ruling has come out, in a sense, accidentally. The Council have permitted the impression to become almost universal among chemists that the owner of a shop alone need be qualified, and might leave his business or businesses to be conducted by totally unqualified men if it so pleased him. This is not the law as it has been laid down, and we hardly expect that the Scottish High Court will reverse the interpretation hitherto adopted.

The Lewisham poisoning case has no doubt been pigeon-holed in the medical department of the Privy Council, and, sooner or later, unless the Pharmaceutical Council make up their minds to carry out the Pharmacy Act for the benefit of the public, the right of prosecution now reserved to them

will be very properly transferred to other hands. The counsel for the defendant in the Hamilton case was legally weak, but morally strong, when he pressed the official prosecutor as to his knowledge of the general practice of unqualified assistants selling poisons in chemists' shops throughout Great Britain. The Society has no moral right to prosecute one individual in a thousand except as part of a general policy carried out on behalf of the public. The policy we advocate would probably be unpopular for awhile, but it would be supported by all pharmacists who appreciate the serious responsibility involved in the retail sale of poisons; and it would ultimately do more than anything else to secure and advance the legal status of pharmacists in this country.

FAVOURER IRISH PHARMACY.

IN the report which we published last week of the meeting of the Irish Pharmaceutical Council there was a long, but interesting, statement by the President regarding the progress of the Irish Pharmacy Bill. Mr. Brunker therein gave his impression of the proceedings of the Select Committee appointed by the House of Lords to consider the measure. There is one point forcibly brought out by this statement which should be noted by British pharmacists. The Bill for the amendment of the British Pharmacy Acts after a short and unopposed career in the House of Lords has hung fire in the House of Commons, and has remained in this condition for nearly three months. On Monday night again it was on the orders of the day for second reading, too far down in the list, however, to give any hope of its being reached. Will it ever be reached this session? Sir Henry Roscoe and Dr. Farquharson, who have charge of the Bill, apparently do not think so, and it was for that reason that they asked the Government some weeks ago if facilities would be given to get the measure through the House. The Government would offer none. Yet when we turn to the Irish Pharmacy Bill—a measure promoted by a society which numbers less than a hundred members, who will certainly not derive less benefit from the measure than the four or five millions of people which constitute the population of Ireland—we find that the Government has shown intense anxiety to make the measure a safe one, and to get it enacted without delay. "At the request of the Government, and especially of Mr. Balfour, the Bill was," Mr. Brunker tells us, "referred to a Select Committee of the House of Lords. . . . When that Committee met, Lord Limerick, who represented the Government, closely watched everything, and made suggestions . . . and from the interest which Mr. Balfour had already evinced in the subject, he (Mr. Brunker) had great hopes that he would see the Bill through this session." It is highly probable that Mr. Brunker is too sanguine, for Mr. Balfour now has his hands full with the drainage schemes which he has introduced since he smiled on the Pharmacy Bill. But the contrast remains, nevertheless, between the deferential bearing of the Government towards the Irish Bill, and their indifference to the much more important and shorter measure for the amendment of the British Pharmacy Acts. This condition of things completely disposes of the assertion so frequently made by Bloomsbury dogmatists that it is the want of union in British pharmacy which retards the legislation required to put the law which regulates it on a proper footing. In the case of the Irish measure, the opposition is stronger and more pronounced than that which exists in Great Britain. The Irish Society numbers under a hundred, the British counts up by thousands; the Irish Bill affects a population under five millions, and the British one about six times more. The contrast is all in favour of Great Britain having the first chance, yet it is quietly shelved. We need not go far for

the reason. The Irish Council have sought the ear of the Government without delay, whereas it is the custom of the Bloomsbury authorities to indulge in lobbyism, and to trust to the parliamentary influence of eminent scientific M.P.'s. For two successive sessions this latter plan has proved unsuccessful, and it is plain that before another session there should be a change in tactics. A bold stroke should be made to interest the Government in the deplorable state to which British pharmacy law has come. Evils are growing with which it has no power to cope, and these require remedying. It is true that there is obstruction in the way in the shape of the Privy Council, but has there been any serious attempt this past dozen years to "square" the Privy Council, and is there a better time than the present to get rid of old-standing disagreements? With this grievance removed, progress with pharmaceutical legislation would be much more rapid, and it would be possible to get, as in the Irish case, a Select Committee to consider the whole matter if it were necessary. The *Lancet* is fairly on the proper track when it says that such measures should be considered by a committee of experts and others, and then presented to the House. "With all its virtues," adds our contemporary, "Parliament cannot do justice to a question of this kind, which is of vital importance."

THE U. S. NATIONAL FORMULARY.

AFTER several years of undemonstrative work, the committee appointed by the American Pharmaceutical Association to compile a formulary of unofficial preparations have completed their labours, and the result is before us in the shape of a handsome volume of over 180 octavo pages. The arrangement of the matter is similar to the style of the United States Pharmacopœia, and generally the pharmaceutical methods of that standard work have been followed, but in some important particulars the committee have made departures. We have previously commented on the draft formulary, which the committee presented to the 1886 meeting of the Association, and in our issue of October 1 last we were able to give selections from a report regarding subsequent work which the committee had submitted at the Cincinnati meeting. The complete Formulary now contains formulæ for 435 different preparations, and many of the formulæ are new.

The objects of the Formulary are explained in the preface. Briefly, they are that the public demand and physicians prescribe certain preparations for which there is no official standard; the Formulary aims to supply the want. Proprietary preparations are, of course, implied, for "pharmacists are compelled to procure and keep on hand a variety of brands of what is intended to be one and the same preparation", but imitations of popular nostrums were outside of the intentions of the committee, who have, however, found it difficult to draw the line, and consequently a few formulæ for such preparations have crept in, chlorodyne and lactopeptine being amongst the number. The formulæ in all cases are "constructed on rational principles, irrespective of mere appearance and taste, and mainly with regard to uniform composition and reliable effect." It will therefore be seen that the operations of the committee were considerably wider than those of the Formulary Committee of the British Pharmaceutical Conference; there is also a wide difference in the constitution of both committees, the American one consisting of five editing members, and representatives from every State pharmaceutical association in the United States and Canada, all of whom have expressed their opinions and aided in the work, while assistance has also been rendered by the leading pharmacists in the States, and the advice of competent medical authorities has been sought when such advice was likely to be of use. Besides

the lack of such extensive representation the constitution of the British committee and their methods of working do not compare favourably with the American one; but the conditions are different here—the ground not so extensive and the objects not so ambitious.

Turning to the pharmacy of the Formulary we find that the most important difference between the principles of the U. S. Pharmacopœia and the Formulary is in weights and measures: the Pharmacopœia adopts the parts by weight system, but the Formulary has gone back to the old and rational method, "solids by weights, liquids by measure," so far as medicines which are prescribed by measure are concerned. Consequently the fluid extracts of the Formulary are one minim = one grain, instead of one cubic centimetre = one gramme of the drug, as in the Pharmacopœia. The Formulary directions for the preparation of fluid extracts are somewhat more precise than in the Pharmacopœia; thus, instead of the drug being moistened with the menstruum and packed in the percolator, the Formulary directs that it should be distinctly damped, and maintained so during several hours' maceration, and that it is only to be packed in the percolator when it has ceased to swell. In the case of fluid extracts containing glycerine, two menstrua are generally given, one containing glycerine, and the second alcohol and water only. There are given no fewer than fifty-four fluid extracts, but this number is less than that of elixirs, of which there are eighty-six in the book. "Liquors" number forty-one, including several from the British Pharmacopœia and formulæ for such preparations as cochineal colour and "acid phosphates." One curious error has crept in from the draft, hypodermic solution of morphine (containing the sulphate) being described as "Magendie's solution of morphine," whereas that name ought properly to be applied to the solution of citrate of morphine, the formula of which stands before the first named. These formulæ afford a good example of the annotations which enrich the Formulary. We quote two paragraphs which will show the nature of the notes:—

"The development of fungoid growths or micro-organisms in this and similar solutions used hypodermically may be prevented, or at least greatly retarded, by using chloroform water instead of plain distilled water as a solvent. This should, however, be done only with the knowledge, or by the direction, of the physician.

"Another efficient method to preserve such solutions is to sprinkle a little benzoic acid on the surface of the absorbent cotton through which the solutions are filtered. Or about 5 grains of boric acid may be added to each fluid ounce."

Occasionally such notes are descriptive, as, for example, when the committee gravely inform the reader that saccharin is "anhydro-ortho-sulphamine-benzoic acid," and so on. The most numerous classes of preparations, in addition to those named, are syrups (thirty-six) and tinctures (thirty-two). The latter are prepared by the U. S. Pharmacopœia process, and the strength, except when otherwise stated, is 1 troy oz. to 8 fluid oz. of menstruum. Maceration and percolation are employed, and in one case, that of "tincture of quillaja," the drug is first boiled in water for fifteen minutes, the alcohol added to the strained and cooled decoction, and the tincture finished off twelve hours afterwards. On the whole the pharmacy of the Formulary is well up to date. From this, however, we must except Thompson's solution of phosphorus, which is still directed to be made by heating the phosphorus in absolute alcohol, instead of by Mr. Williams's beautiful process, viz., dissolving the phosphorus in hot glycerine. The solution cannot by any possibility retain a twenty-fourth of a grain of free phosphorus in a fluid drachm. Many of the formulæ are for preparations which are much asked for by the public, and of these we hope to give a selection at an early opportunity.

British Pharmaceuti- cal Con- ference.

The usual announcement of the meeting of the Pharmaceutical Conference has been lately published. The sessions are this year to be held in Bath, which the local circular declares to be, "with perhaps the exception of Edinburgh, the most beautiful city in the Kingdom." The pleasant opportunity which this Conference affords of becoming acquainted with a city of such historical and social renown as Bath is one which should not be carelessly dismissed. The attractions, beyond the more strictly scientific ones which the meeting is sure to include, are a Presidential address from Mr. F. Baden Bengel, from whom we may confidently expect a thoughtful and refined discourse. On Monday evening, September 3, that is the evening before the meeting, a reception of members and conversazione will be held at the Grand Hotel. On Tuesday and Wednesday luncheons will be served in the Guildhall. A smoking concert is to be held at the Grand Hotel on Tuesday evening, and after the day's work is concluded on Tuesday and Wednesday opportunities will be given for visits to the Baths, to the Abbey, to the Botanical Gardens, and to a floral fête at the Sydney Gardens. For the extra day, Thursday, September 6, an excursion to Chepstow, the Wye, and Tintern has been arranged. The total charge for all these entertainments is fixed at 17s. 6d., or the Chepstow excursion can be taken alone, if preferred, for 12s. 6d. Mr. H. Hutton, of 7 Bridge Street, Bath, has undertaken the secretarial labours connected with the meeting, and to him applications for bedroom accommodation should be addressed without delay.

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American Pharma- ceutical Association.

The thirty-sixth annual meeting of the American Pharmaceutical Association will be held in Detroit, Mich., beginning September 3, at 3 p.m. the same day that British Pharmacists will "go to Bath." The Detroit pharmacists are making herculean efforts to entertain the American pharmacists, and it is believed that the new arrangements under which the Association meets in sections will be productive of much good work, with less friction and in less time than heretofore.

* *

The Comptroller-General in his report for 1887 states that the number of applications for Patents and Trade-marks during the year was 18,051, and for trade-marks 10,586. The former shows a substantial increase over the previous year, but the latter marks a falling-off of 91. The total number of designs applied for amounted to 25,734, exclusive of 309 "sets" of designs. In the previous year 23,717 single designs and 324 "sets" were applied for. The term "set" includes any number of articles ordinarily on sale together, irrespective of the varieties of the size or arrangement in which the particular design may be shown on each separate article. There were 5,331 applications for hearings which were attended to in the trade-marks branch of the Patent Office during the year 1887. Of this number 2,711 applicants accepted the decision of the Comptroller without attending a hearing; 2,620 applicants attended hearings, with the following results:—Seventy-four of the applications were accepted, and 2,546 were refused or were accepted with modifications, or were reserved for further consideration pending the issue of the report of the committee.

* *

The French Essential Oil Trade.

A recent review of the position of the essential oil business in the South of France during the season 1887-88 states that the bitter-orange tree, which bears a particularly heavy crop of flowers suitable for distilling purposes, is cultivated mainly at Cannes, le Cannet, Golfe-Juan, Vallauris, Biot, Cannes, Vence, le Bar, Antibes, le Cap, Nice, and Mentone. Cannes and le Cannet together contain from 150,000 to 160,000, Golfe-Juan and Vallauris 200,000 of these trees. The average crop of flowers in the three principal districts is from 320,000 to 340,000 kilos. at Golfe-Juan, 150,000 kilos. at le Cannet, 60,000 kilos. at Cannes, and 30,000 kilos. at Antibes, Mentone, Nice, and Monaco. Flower gathering commences as a rule during the last days of April, and continues, depending upon the state of the weather, till May 20 to 25.

orange tree yields, according to age, from 1 to 8 kilos. of waxes, and an experienced gatherer can collect daily about kilos. flowers. The orange tree is extremely sensitive, and able to bear more than three or four degrees of frost, so at occasionally during the severe winters, such as that of 87-88, the tenderest shoots are killed by frost. In December 87 the bitter-orange trees on the Riviera suffered severely from frost, and in February, and subsequently on March 29 of this year, hailstorms wrought further damage, reducing the approximate crop of flowers at Vallauris, Cannes, Cannel, Antibes, Cagnes, St. Laurent, and Nice to one-fourth of an average yield, or perhaps even less; while, in consequence of the pruning necessitated by the decay of the joints of the trees, serious apprehensions are entertained for the coming harvest. The violets also have suffered from the clemency of the weather, and have yielded only 25 per cent. of a normal crop, resulting in an anticipated advance of the price of the leaves to 5f. per kilo. The following are the prices of flowers for distilling during the last three seasons:—

Variety	1885	1886	1887
	Fcs. per 100 kilos.	Fcs. per 100 kilos.	Fcs. per 100 kilos.
Orange (sweet)	30	35	33
" (bitter)	70	70	85
Se	60	60	60
Camphire	250	250	250
Berose	200	200 to 250	300
Blet	300	200 to 300	275
Essie	800	700	1,000 to 1,700
Ranum	5	7	6½
Orange leaves (sweet) ..	5	5	3
Rose leaves (bitter) ..	12	12	15
Berry laurel	8 to 10	8 to 10	12
Yme	11	8	8
Vender	8	7	9
Int	14	10 to 12	11
Semary	4	5	5½
Like	5½	4	3½

* *

The Hop Bitters Litigation.

It would seem as if the principals in the long-drawn-out law-suits between the Hop Bitters Company (Limited) on the one side and Mr. Albert N. Beck, of Hastings, on the other have agreed to conditions whereby their respective actions have been settled without a public fight. The formal report of what occurred in the Court will be found in our usual legal section; we have asked both parties to the actions to inform us what is the practical outcome of the contest thus concluded, and we have received the following information. The Hop Bitters Company give us the report of their solicitor to them, which is as follows:—

"An order was made on Friday last by Mr. Justice Stirling restraining the defendants from infringing the plaintiffs' trade-mark and from selling or offering for sale any Hop Bitters, Tonic Bitters, or other compound contained in bottles having affixed thereto any labels similar to, or only colourably differing from, the bottles and labels used by the plaintiffs, and so contrived or prepared as to represent or lead to the belief that the compound manufactured or sold by the defendants is of the plaintiffs' manufacture. Mr. Justice Stirling also made an order dismissing Beck's action against the company for circulating 'proclamation' bills. Orders were also made against Crisford, Brigden, Dicker, and Riscoe."

Mr. Beck writes:—"I am continuing the sale of my compound Tonic Hop Bitters, and shall push them, but in future they will be put up in round green glass bottles. Agents must sell out their old stock in two months."

From this combined information the trade will be able to fairly gather the legal position of the controversy.

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Modern Advertising.

I should rather like to know (says *Truth*) who reads the *Banner of Faith*—the organ of the Church Extension Association. It seems from the action which Mr. Vickers brought against the association last week [a report of which was published in our last issue] that it would rather drop 500%, and stand an action or damages than let an advertisement of Beecham's Pills appear in the *Banner of Faith*. Possibly they were right in

this, for they had previously given grave offence to their readers by publishing a poetical advertisement of Pears' Soap entitled "Bishop Q, of Wangaloo." But are the readers of the *Banner of Faith* a peculiar sort of Peculiar People who have "conscientious objections" not only to the use of pills, but to the use of soap? Whatever they are, I feel rather sorry for these good people, for a person liable to be shocked by the sight of an advertisement of a pill or a soap must find life one long succession of shocks in the present day. *A propos* of this (the same writer continues), I wonder no one has ever publicly protested against a shocking conjunction of advertisements which may be seen in some of the London tramcars. Of course, it is accidental, but that makes no difference to the effect. In one panel you read, "What gives relief from care and grief? Why don't you know—Sapolio." And in the next, "Come unto me all ye that labour and are heavy laden, and I will give you rest." The moral of that I take to be that advertising spaces are not the most suitable places from which to preach the gospel. Mr. Barrett, by-the-by, who is the backbone of Pears' soap, announced a few days ago that his firm spent 100,000l. a year in advertising that excellent article, of which 55,000l. is expended in Great Britain, 30,000l. in the United States, and 15,000l. on the Continent, principally in France and Germany.

* *

The Consumption of American Soaps. Answering certain complaints that the export trade in American soaps is dwindling, the *Oil, Paint, and Drug Reporter* quotes official statistics, which, it says, do not confirm that view, the figures for the past five years having been as follows:—

	Toilet, value	Laundry, lbs.
1887	\$57,751	19,682,466
1886	60,646	18,610,518
1885	48,129	13,804,938
1884	39,636	14,169,424
1883	42,021	12,460,733

Hayti heads the list of foreign buyers of American laundry soaps by taking 5½ million pounds last year. England is rated next in importance, followed closely by the Republic of Colombia. Brazil, Mexico, Scotland, British Guiana, and British West Indies are also large consumers of American soaps, and the balance of the trade is scattered among a number of countries. Australia sends the heaviest orders for toilet soaps to the United States, the shipments last year amounting to \$14,656 in value. Our contemporary questions whether, in the face of such an increase in the foreign business, the argument of the soap-makers who ask for increased protection can be pronounced valid.

DR. R. G. ECCLES has been working on the subject of whether apomorphine is found or not in old solutions of morphine hydrochlorate. Two or three years ago Mr. D. B. Dott, of Edinburgh, conclusively proved that it is not, and Dr. Eccles has gone over the old ground with the same result; but his results seem to indicate that the morphine is modified, or else a new and hitherto unreported decomposition product is formed, free hydrochloric acid disappearing meanwhile.

THE CHICAGO MEDICAL SOCIETY has recently instituted an inquiry regarding the priority of the discovery of chloroform. Liebig published his discovery in *Liebig's Annalen*, November, 1831. Soubeiran claims to have published his paper on ether bichlorique in October, 1831, but it happens that that issue of the *Annales de Chimie et de Physique* did not appear until January, 1832. Dr. Samuel Guthrie had an article, dated September, 1831, in the January number, 1832, of Silliman's *Amer. Jour. of Sci. and Art*, in which he refers to an alcohol solution of chloric ether; and in the October number, 1831, of the same journal he writes on a "New Mode of Preparing a Spirituous Solution of Chloric Ether," and states that "during the last six months a great number of persons have drunk of the solution of chloric ether not only freely, but frequently to the point of intoxication." As the rules of Silliman's journal were that papers for publication should be in his hands six weeks before they were printed, it would seem that Dr. Guthrie was in the field before either Liebig or Soubeiran.

PARLIAMENTARY NEWS.

PATENTS, DESIGNS, AND TRADE-MARKS BILL.

WHEN this Bill arrived at the committee stage in the House of Lords on July 12, the Lord Chancellor objected to the 26th clause in so far as it created the Palatine Court of Lancaster practically a branch of the High Court of Justice. Another objection which he urged was that it threw these cases into the Chancery Division, from which he was every day engaged in removing them to the Queen's Bench Division. He asked Lord Herschell to strike out the clause. Lord Herschell expressed his astonishment that the Lord Chancellor as a representative of the Government should object to any part of the Bill which had been approved by the Government, and it was hard that he (sitting on the Opposition benches) should have to stand up for a Government measure. The Earl of Onslow was prepared to accept the Lord Chancellor's objection, and the clause was ultimately agreed to, the one following (27) being struck out.

MEDICAL OFFICERS UNDER THE NEW COUNTY COUNCILS.

IN the course of the debate on the Local Government Bill on Thursday,

Sir LYON PLAYFAIR moved, the second reading of a new clause, providing that, except where the Local Government Board for reasons brought to its notice may see fit in particular cases specially to allow, no person shall hereafter be appointed the medical officer of health of any district, or the deputy of any such officer, unless he be legally qualified for the practice of medicine, surgery, and midwifery, nor shall any person, after the first day of January, 1892, be appointed the medical officer of health of any district or districts containing a population of 50,000 or more inhabitants, unless he be registered in the medical register as the holder of a diploma in sanitary science, public health, or State medicine, under section 21 of the Medical Act, 1886.

Mr. RITCHIE said he should have no objection to accept the clause proposed by the right hon. gentleman, but he thought it should be accompanied by a proviso that the exemption from its operation should extend to medical men who had been during the three years preceding the operation of the Act medical officers of health under a sanitary authority with a population of not less than 20,000. (Hear, hear.)

A long discussion followed, in the course of which Mr. Stephens regretted that the right honourable gentleman had accepted the amendment. Mr. Picton and Sir Guyer Hunter supported the amendment, and the latter elicited from Mr. Ritchie that no officers are appointed in perpetuity, and a proviso would be added to show that the local authority would not be prevented from appointing men who had complied with the provisions named. Sir G. Hunter expressed the hope that all medical officers would have the certificates in sanitary science; they were easy to get and cheap. This was not, however, the opinion of Dr. Farquharson who asked Sir Guyer how he would like to sit down and write an examination paper on the laws of heat and the principles of pneumatics and hydraulics. (Laughter.) He believed it would be of great service to tried medical officers to be exempt, and he did not think it was any hardship that in future appointments the medical officers should be obliged to show to the public some specific qualification.

After some further discussion, during which it was stated that the provision would be extended to London, the clause was read a second time, and straightway Mr. F. S. Powell moved to omit from the clause the words "legally qualified for the practice of medicine, surgery, and midwifery," and insert "for the time being registered under the Medical Act of 1858, or any Act amending the same," but Sir Lyon Playfair opposed, and the amendment was withdrawn.

Mr. Ritchie's amendment to add as an exemption "or has been during three preceding years a medical officer of the district, or combination of districts, of a population of not less than 20,000," was accepted, and the clause added to the Bill amid applause.

THE well-known old business, generally known as Wilmot's, at 93 Borough High Street (on the Surrey side of London Bridge), latterly carried on by Messrs. P. K. Fripp & Co., has been closed.

Foreign and Colonial.

EXPORT DUTY ON COPAL GUM IN THE CONGO STATE.—

Until the beginning of the present year an export duty of 8f. per 100 kilos. was imposed on all copal gum exported from the territories of the Congo State. This duty had the effect of hampering the trade in inferior kinds of copal, and it has therefore been decided to let off the common, or white, copals with an export duty of 2f. per 100 kilos. Eight francs will continue to be paid on high grade, or so-called "red copals."

BOTANICAL RESEARCH IN BRAZIL.—The Amazonas Botanical Museum is about to issue a review of the work accomplished in that institution, under the direction of J. Barbosa Rodrigues. The first number will describe twenty-two new palms and various other interesting plants.

THE QUICKSILVER MINES AT IDRIA.—A recent issue of the German *Illustrirte Zeitung* contains an interesting article on the Austrian quicksilver mines at Idria, which were accidentally discovered nearly four centuries ago by a workman, who, filling a pail at a spring, found metallic mercury at the bottom of the vessel, and, realising the importance of his find, commenced to exploit the soil in company with a soldier of his acquaintance and some other associates. In 1504 they sold their interest to a corporation, which began operations energetically. In 1507 the Emperor Maximilian of Austria opened a mine in Idria on his own account, but in the same year the Venetians invaded the country and seized the mine. In 1510, however, they were driven away again by the Imperial troops. The mines were then leased by Maximilian to the St. Achazi Mining Company. In 1580 all the mines came into the possession of the ruling prince, and the Mining Reservation for the Montanwerk was founded by the "Carolina Mining Law for Idria," which still stands. Since that time the mines at Idria have belonged to the State. The principal entrance to the mine (the "Anthoni-Stollen") is in the centre of the city of Istria, and the necessary water power is supplied by the Idrizza river. The mines cover an area of about 111 acres, are worked by over 1,000 hands, and are provided with six shafts. There are now 959,430 cubic metres of ore in the mines, which, with a yearly output of 13,630 cubic metres, will last 70½ years. The quicksilver of Idria occurs partly as native mercury in globules (this is collected in leather bags), but most of it is found in combination with other substances, such as idriantite, or "burning ore," which is found at great depths, and, being very inflammable, is thought to be the cause of fires in the mines. In the deepest idriantite shafts a temperature of about 90° F. prevails, although the best appliances for ventilation known are employed. The ore which has been blasted or hewn out is delivered to the stamping mill, where it is prepared dry and is finally treated in shafts and reverberatory furnaces. The gases from both pass through condensation tubes into a condensing chamber, from which they pass through an enormous chimney into the open air. On account of the great length of the cold tubes through which the quicksilver fumes have to pass, the metal falls like fine rain in the condensing chamber, from which it is conducted through channels to iron vessels, and from these it is poured into iron flasks for shipment. By this treatment the loss of mercury is reduced to a minimum, and the injurious effect on the health of those employed in the smelting works is greatly lessened. A peculiarity of the smelting process at Idria is the appearance of "stupp" in the furnaces. This is a mixture of metallic quicksilver, hydrocarbons, and mercurial salts. It is collected in receptacles, the metallic quicksilver is extracted by pressure, and then the residue is mixed with lime and treated in a reverberatory furnace. The production of cinnabar also forms an important feature of the works at Idria, and from this metallic ore three kinds of vermilion—the light red, the dark red, and the Chinese—are manufactured at Idria. From 1819 to 1881 the Idria mines yielded to the State a net profit of about 2,000,000l. In 1874 alone the profit reached 160,000l., in consequence of the advance in the price of quicksilver during that year.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., July 19

THERE is very little change to report this week in the drug and chemical markets. The continuance of cold and wet weather is having a bad effect in some departments of trade; but the amount of business reported by the leading houses seems to continue fairly satisfactory.

CAFFEINE MANUFACTURE.—We hear that a good start has been made by Messrs. Howards & Sons and Mr. Thomas Whiffen in regard to the manufacture of caffeine from "condemned tea." Each of these firms has this week received from the Customs authorities one ton of tea "denaturalised" with petroleum. This addition to the tea will not in the least interfere with the manufacture of the caffeine, while it will effectually prevent the tea being used for drinking purposes. It is understood that the tea is given for nothing; hitherto it has been destroyed, or worse, viz., presented to foreign manufacturers, who sell the caffeine on this market. All who have taken part in getting the concession from the Government are to be congratulated on the result of their persistency.

TARIFF CHANGES.—The Russian Government announce that glass syphons with tin mountings will henceforth pay duty of 60c. to 9r. 70c. gold per pound according to finish and material, and that bisulphide of carbon in iron barrels will pay 22c. per pound, 22 per cent. being allowed for tare, but the iron barrels are liable to a duty of 1r. 40c. per pound. Hitherto the German Customs have allowed 6 per cent. for tare on cocoa butter and expressed oil of nutmegs in tablets, but in future the allowance will only be 2 per cent. Several changes have recently been sanctioned by the United States Government, amongst them jasmine oil (prepared by the *enfleurage* process) is held to be exempt from duty; anti-febrin, like antipyrin, is held to be dutiable at the rate of 50 per cent. *ad valorem*, being a "proprietary preparation"; amyl-acetic, amyl-butyric, and amyl-valerianic ethers for the preparation of fruit essences, will in future pay duty at the rate of \$2.50 per lb., and "Ching's dugong oil," which is put as a proprietary preparation, is to be subject to 50 per cent duty *ad valorem*.

CUSTOMS TARIFF OF WESTERN AUSTRALIA.—The following are the rates of Customs duty now levied on certain drugs and chemicals in Western Australia under the Tariff Act of 1888:—Arrowroot, 1*d.* per lb.; ginger, 3*d.* per lb.; methylated spirit and other spirits rendered unfit for human consumption, 1*s.* per gallon; oil (fish and vegetable, except salad in bottles), 6*d.* per gallon; oils, mineral and turpentine, 6*d.* per gallon; pepper, 3*d.* per lb.; soap (not toilet), 3*s.* per cwt.; soda, crystal, 2*s.* per cwt.; spices, 3*d.* per lb.; spirits, 15*s.* per gallon; spirits of wine, rectified, not being for medicinal purposes, 1*l.* per gallon; sugar, molasses, treacle, and golden syrup, 4*s.* per cwt.; tobacco for sheep-wash, 3*d.* per lb.; vinegar, 6*d.* per gallon. The following articles pay a duty of 20 per cent. *ad valorem*:—Aërated and mineral waters, perfumery, and perfumed soap (toilet and fancy).

MR. FIGGIS, of Lewis & Peat, the chosen Gladstonian-Liberal candidate for Hampstead, gave a political garden-party in his fine grounds at Hampstead last Saturday. By a strange freak of fortune there was a Primrose League party at the house next door the same afternoon. "Mr. Figgis is," says the London correspondent of the *Manchester Guardian*,

"an absolutely ideal candidate for Hampstead, as it is understood that he desires a contest where there is hard work to be done, money to be legitimately spent, and very little chance of getting in. Hampstead fulfils all these conditions."

PROPOSED REVISION OF THE ITALIAN TARIFF.—A Bill is at present under consideration by the Chamber of Deputies which will materially alter the duties on chemical products, the alterations being on a line with the recommendations of the Special Committee appointed in June, 1887. The following are the changes recommended, and it is believed that the Chamber of Deputies will accept the proposals without alteration:—

	General Tariff	Proposed Tariff
	Lire. Cs.	Lire. Cs.
Phosphoric acid per quintal	10	Free
Gallic and tannic acids, impure "	Free	3
Gallic, tannic, and pyrogallie, purified "	10	25
Crude acetic acid "	1	2
Citric acid "	10	15
Tartaric acid "	10	15
Salicylic acid and salicylates "	5	4
Potash and caustic soda (a) "	5 and 0.50	0.50
Oxide of zinc and white zinc "	5	8
Mineral and vegetable alkalies and acids, pyrolignite of iron, and aluminium "	4	2
Acetates not specified "	1	4
Carbonate of baryta, natural "	2	0.50
" " artificial "	1	1
Bicarbonates of sodium and potassium "	0.50	5
Chloride of tin "	4	8
Nitrate of silver (b) "	5	8
Soda, refined "	3	Free
Borax "	0.50	1
Sulphate of ammonia "	0.50	Free
" aluminium "	0.50	2.50
" baryta, artificial "	1	2
" iron "	2	0.50
" copper and zinc "	2	2.50
" potassium "	0.50	Free
" sodium "	0.50	1
Sulphate, bisulphate, and hyposulphite of sodium and potassium "	0.50	1.50
Sulphate of zinc, with or without vegetable sulphates "	Free	8
Saccharin "	4	100
Chromate and bichromate of potassium "	4	1
Salts of bismuth "	100 and 200	60
Bromine and iodine "	4	Free
Bromides (<i>bromuri</i>) and iodides (<i>ioduri</i>) "	4	25
Glycerine, purified "	4	12
Oxygenated water "	4	0.50
Camphor, refined "	25	12

ACIDS.—English tartaric is steady at 1*s.* 6*d.* to 1*s.* 6½*d.*; foreign, 1*s.* 5½*d.*. Citric on the spot obtainable at 1*s.* 7*d.*. Oxalic acid remains unchanged at 3*d.* to 3½*d.*, according to quality.

ARROWROOT, which seems to be in supply quite in excess of demand, continues inanimate. There were nearly 2,000 packages of all descriptions catalogued, and only about 10 per cent. sold. Barbadoes, of fair quality, in cases at 2½*d.*, and St. Vincent at 2¼*d.*

BLEACHING POWDER sells steadily at 8*l.* 5*s.* to 8*l.* 10*s.*; Tyne, 7*l.* 7*s.* 6*d.* to 7*l.* 10*s.*

CAMPHOR, though materially diminishing in supply and reduced in stock, does not advance relatively. The market is quiet but steady at last quotations.

CAPSAICUMS of choice quality are wanted, and of such from Natal a small quantity sold at 43*s.* 6*d.* to 45*s.* 6*d.*. Other sorts are plentiful, low in price, and scarcely any demand prevails. A few bales stalky, but bright, Coconada brought 20*s.* per cwt.

CASSIA LIGNEA sells in retail lots at 23*s.* About 650 boxes were catalogued for sale this week, but only a small proportion sold, chiefly coarse broken at 14*s.*

CHILLIES are not much in demand speculatively or for

foreign orders, and the home trade requirements are very restricted. There were 350 bales, &c., catalogued, and about a third sold—selected bright Indian at 41s.; fair red, slightly mixed, African at 28s.

CINCHONA.—At Tuesday's sales the supply brought forward was much lighter than usual, and the somewhat higher prices realised can scarcely be regarded as a criterion of market rates. There were 774 packages of South American offered, of which nearly 400 packages sold. Bolivian cultivated Calisaya, quill part long druggists' kind, sold at 8*d.* to 10½*d.*; Pitayo (import 1884), part flat Maracaibo kind, at 1½*d.* to 2*d.*; soft Columbian (import 1881), at 2*d.*, and old New Granada at 2*d.*. Holders of East Indian and Ceylon barks have become firm, and sent only 938 packages. There was a good demand, and an average advance of 10 per cent. was realised, the unit being fully 2*d.*. Some interest was excited by the appearance of 57 bales from St. Thome (west coast of Africa), *via* Lisbon. The consignment reached altogether some 2½ tons, and was the largest yet received from this quarter. The bark sold as follows: pale yellow quill of the Calisaya variety, sold at 6*d.* to 6½*d.*, small and more broken, 4*d.* to 4½*d.* per lb.

CIVET.—The war between Italy and Abyssinia seems to have had the effect of stopping the supply of this small article. For the present none is coming forward, and perfumers who use Civet are likely to have to depend on second-hand holders for some months to come.

CLOVES were offered very freely, there being 1,508 bales Zanzibar, a tenth of the stock, catalogued for auction, a fourth of which quantity was placed in the room and subsequently nearly 1,000 bales changed hands privately, prices being 6½*d.* to 6*d.* for fair to good bright, 6½*d.* to 6½*d.* ordinary to middling, showing a decline of about ½*d.* per lb. The greater part of 12 cases Penang offered was sold at 9½*d.* to 10½*d.* for rather dull middling.

CREAM OF TARTAR.—Firsts firm at 116s.; seconds, 113s.

GINGER continues dull at low prices, with merely hand-to-mouth trade. The weekly public sales embraced about 940 packages of all descriptions, nearly half of which met buyers. Jamaica cleaned, of medium size, at 68s. 6*d.* down to 57s. 6*d.* for hardish; ordinary lean and rough to middling bringing from 43s. to 54s. Cochin, fair, sound, trimmed, bold, and medium, 53s. to 56s. 6*d.*, and at a varied range of prices; other sorts as low as 13s. 6*d.* for rough, common, wormy goods suitable for grinding or distilling purposes.

GUMS.—Thursday's public sales comprised of gums in which our readers are interested the following: 523 packages *Olibanum*, the greater part of which were held by importers quite outside the current demand; the small quantity which sold consisted mainly of pickings, which show no alteration whatever in value. *Arabic* is still in heavy supply, but consists mainly of inferior qualities, for which the demand is somewhat restricted, though new uses have been found for many of such by chemical treatment. Choice descriptions command high prices, but all other sorts are to be bought relatively cheaply. There were nearly 2,300 packages catalogued, but only a comparatively small proportion sold; palish red *East Indian* at 105s. to 114s. 6*d.* down to as low as 30s. 6*d.* for dark red *Amrad*. *Ghatti* realised up to 55s. for fairly good bold. *Australian* bright glassy brought up to 58s., and frosted reached 65s. 6*d.* *Cape* soluble glassy went as high as 63s., and as low as 33s. for foul. Nearly everything sold consisted of manufacturers' goods, little being of druggists' sorts.

HONEY.—We hear from Liverpool that the demand runs on the lower qualities, and that full rates are asked. Sales of Chilian, pile 1, have been made at 25s. per cwt. Honey is in limited request, as is usual at this time of the year. 10 barrels Jamaica, at the sales, were bought in.

ISINGLASS.—The monthly sales were held on Tuesday last, when 272 packages (in all about 61,000 lbs.) were offered. This was a very small supply, but it proved to be greater than the demand, which was very flat, and previous prices were only just maintained. Brazil (Maranham) sold good ordinary lump, 2s. 2*d.*; low horny, 1s. 9*d.*; low middling tongue, 2s. 6*d.*; ordinary, 1s. 9*d.*; small thin, 1s. 7*d.*; pickings, 1s. 3*d.*; 1 cask (158 lb.) West India sold, good middling lump, 2s. 6*d.* Penang sold from 3s. to 3s. 3*d.* for leaf, good to fine pale and yellow, down to 1s. 3*d.* to 1s. 6*d.* for good

middling to good cake. The next sales are fixed for August 21.

LIME JUICE is generally being held outside existing prices; and 20 pancheons Jamaica, in sale, were retired above the value.

MACE, in sympathy with nutmegs, shows improvement in demand and advance in value. 78 packages submitted to auction this week were nearly all sold; fair reddish and dull to palish, though broken, Bombay at 2s. 5*d.* to 2s. 8*d.*, and some West Indian at the same prices. Red bright Penang at 2s. 9*d.*, and wild Bombay at 10½*d.* to 11*d.*, and down to 7*d.* for common dark.

NUTMEGS have been dealt in more freely at slightly hardening prices, and a better general demand exists all round, some transactions having taken place which will tend to improve the market. This week's auctions included 200 packages, about half of which were quitted; 68 to the lb. down to 65 to the lb., at 3s. 3*d.* to 3s. 5*d.*; 93 to the lb. down to 81 to the lb., at 2s. 6*d.* to 2s. 9*d.*; 157 to the lb. down to 113 to the lb., at 1s. 7*d.* to 2s. 3*d.* for Penang, a small proportion of West Indian selling at relative rates.

OIL (OLIVE).—It is reported that the shipments from Naples during last month were only half as much as they were in May, the bulk being from Gioja. The prospects for next crop in the latter district are not very hopeful; at the best a very short crop only is expected, owing to the drought which is prevalent. In Gallipoli a similar state of affairs exists. On that point one report says:—In the Gallipoli district the olive trees flowered very well, but further progress has not fulfilled the hopes first raised. Present appearances would justify the expectation of harvesting about one-third of a full crop; but last year's delusion teaches caution, and the great want of rain, which has now continued during eight months, leads many to fear that the trees may not possess the vitality requisite to face the chapter of accidents still likely to menace the crop between this and maturity. The stock of oil at Gallipoli on June 30 was 4,187 tons, as compared with 4,635 tons last year and 6,637 tons in June, 1886. The total exports from the Italian ports during the six months ending June 30 amounted to 14,200 tons. The following were the stocks held here on that date, compared with the stock in the corresponding periods of the two previous years:—

		1888	1887	1886
London ..	pkgs.	974	1,300	2,367
Liverpool ..	tuns	483	530	480

The present prices are 33*l.* 10s. for Mogadore and 34*l.* for Messina oil, but sales even at these prices are of a retail character. The Liverpool market is steady, but the demand limited.

OILS (VARIOUS).—The business in *Cocunut* continues of a limited character. Cochin is quoted at 24*l.* 10s. to 27*l.* for spot; Ceylon at 22*l.* for pipes, and 22*l.* 10s. to 22*l.* 15*l.* for hogsheds. Mauritius oil is quoted at 24*l.* 10s. *Cotton-seed*, ordinary refined in casks, spot, 20*l.* 10s. Hull, spot, casks, 19*l.* 15s.; month, 19*l.* 15s.; August, 20*l.*; November-April, 18*l.* 7s. 6*d.* *Linsced.*—There is little demand at 18*l.* to 18*l.* 2s. 6*d.*; August, 18*l.* 5s.; September-December, 18*l.* 7s. 6*d.*; January-April, 18*l.* 10s. Hull, spot, 18*l.* 5s. to 18*l.* 7s. 6*d.*; August, 18*l.* 7s. 6*d.*; September-December, 18*l.* 7s. 6*d.*; January-April, 18*l.* 10s. The market in Liverpool is quietly steady for *Palm*, soft oils selling at 17*l.* 10s. to 17*l.* 15s., and hard oils at 16*l.* 10s. to 16*l.* 15s. per ton quay and transit. Here sales are unimportant, and fine Lagos is quoted at 20*l.* to 20*l.* 10s. *Petroleum* oil is unaltered. American, on the spot, 5½*d.* to 6½*d.*; September-December, 5½*d.* to 6*d.* Russian, spot, 5½*d.*; September-December, 5½*d.* *Rape* is firmer, 24*l.* to 24*l.* 5s. being quoted for refined. The *Turpentine* market also shows some improvement, and closes firmer. American spirit, 26s. 6*d.* to 26s. 9*d.* on the spot; September-December, 26s. 6*d.* to 26s. 9*d.*

OPTUM.—Reports from Constantinople indicate a weak market but no change of importance in quotations. The year's crop is estimated at 10,000 cases.

OTTO OF ROSE.—The anticipations of much lower prices which were at one time indulged in in certain quarters are now somewhat less pronounced. The crop seems to have

been a fair one, but it is generally considered that prices will probably be fairly maintained.

PEPPER is dull, but fairly steady. Arrival business has been confined to about 70 tons of Singapore black, June-July shipment at 7½*d.*, and July-August at 7¼*d.*, close at hand 7¾*d.* to 7½½*d.* There were in auction this week 960 bags black, of which only a small proportion sold: good shot Malabar at 8½*d.*, bright Lampong at 7¼*d.* Spot private sales have been confined to trade requirements. White is little changed, and the private sales have been small, among which are 100 bags Penang at 10¾*d.*; 300 bags in the auctions were in part sold at 11½*d.* for fair Singapore, and 10¾*d.* to 10¾*d.* Penang.

PIMENTO remains without animation at almost the minimum of prices; all speculation in the article is at a standstill, and private transactions not worth quoting. There were 760 bags in the public sales, and only a small proportion found buyers at 2¾*d.* to 2½*d.* for fair to good as imported.

POTASH SALTS.—Chlorate firm at 5¼*d.* to 5¾*d.*; bichromate, 4½*d.*; prussiate quiet at 6¾*d.* for foreign and 6¼*d.* for English.

QUICKSILVER.—The importers, price is still 7*l.* 10*s.*, second hands quoted 7*l.* 8*s.* 6*d.*

QUININE.—German makers are not present sellers, though they say they will entertain offers of 1*s.* 5½*d.*; there are, however, no buyers or speculators at 1*s.* 5*d.*, at which there would be a few sellers, no doubt; there are also, doubtless, buyers at 1*s.* 4½*d.* and no absolute sellers. Second-hand holders are at present unheard of.

SAGO is a shade easier, though stocks are only moderate. 1,340 bags offered at the hammer were nearly all sold under it; medium grain at 9*s.* 9*d.*, and fair to good small at 9*s.* 3*d.* to 9*s.* 6*d.*

SHELLAC.—Notwithstanding the manifest improvement in the statistical position so far as regards shipments from Calcutta—which are to the world for the first five months of 1883 63,944 chests, against, for the corresponding period of 1882, 94,657 chests—there is but little animation in the market, and, although prices have hardened to a slight extent, the business done has been very restricted. Private transactions on the spot have been mostly confined to cash parcels, and include, of Orange, about 200 cases of the AS to Octagon B and FOS brands at 55*s.* to 60*s.* per cwt.; 100 cases SD at 51*s.* 6*d.* to 53*s.*; and 250 to 300 cases rather off TN to fully equal to that standard at 42*s.* to 44*s.*; rich small lots on prompt at 1*s.* more. Trade orders for Garnet have found further sellers at 36*s.* for good AC. The American trade this week has been mainly confined to Second Orange of the TN mark, at 46*s.* 6*d.* landed terms for near at hand, and 46*s.* to 46*s.* 6*d.* October to January, next shipment, the latter being, of course, "bear" operations. The Tuesday's auctions embraced 508 chests of all descriptions, rather over half of which were quitted in the sale-room, and subsequently. First Button worked but a little off colour at 56*s.* to 57*s.*; AC Garnet at 35*s.* to 35*s.* 6*d.*, showing a slight decline; and unworked button, dark to good fourths, at 35*s.* to 39*s.*; middling to good seconds at 45*s.* 6*d.* to 49*s.* 6*d.*, being fully 1*s.* per cwt. below the recent advanced prices. The comparative largeness of the existing London stocks militates against speculators and the trade taking a lively present interest in this article, but the falling-off of Continental supplies should early tell on our market.

SODA SALTS.—Caustic is rather more inquired for. London quotation now 6*l.* 15*s.* for 60 per cent.; ash, 1½*d.*; crystals, 2*l.* 8*s.* 6*d.* (Tyne, 2*l.* 1*s.* 6*d.*); bicarbonate firm at 5*l.* 5*s.* to 5*l.* 10*s.*

SULPHATE OF COPPER firm at 19*l.* 15*s.* to 20*l.* At the latter figure there are sellers.

TAMARINDS continue to receive attention at the advanced figures. 183 barrels, &c., were offered at auction, over two-thirds being sold at 21*s.* to 26*s.* for ordinary to fair bright.

TAPIOCA.—The recent demand has in a measure subsided, but prices have not given way, and the statistical position fully justifies the existing condition of the market. 1,300 bags flake in auction were all bought in, as were also 450 bags pearl, with the exception of a small proportion medium

grain, of good quality, which sold at 23*s.* 3*d.* per cwt., being firm. 90 bags of flour were retired.

TEA.—A large quantity of new Moning has been placed on the market this week, and, considering that trade throughout the country in tea is somewhat quiet, the teas offered have been well taken by the trade, and the average of prices paid for the finer grades is undoubtedly very high. We are doubtful if country buyers will continue to take these fine teas at these rates when Indian teas come in more freely. Common new Shantams have sold at 5½*d.* to 6*d.*, useful Lyings and Onfas from 7½*d.* to 9*d.*, and very serviceable Onfas may be had from 10*d.* to 1*s.* Ningchows and Pekoe flavoured teas under 1*s.* are scarcer, but a large number of Keemuns and Kintucks have changed hands between 1*s.* 3*d.* and 2*s.* Kaisows ex *Glenogle* are selling very slowly in the country, and common sorts have fallen very heavily—down to 5½*d.* for common new Sueykut in public sale. Old Congous are steady from 4*d.* to 6*d.*, some ¼*d.* dearer. Newmakes curly leaf are scarce and dearer, teas from 9*d.* to 1*s.* free from tax being very difficult to buy. S. Capers new season's show good value for lower grades, from 5½*d.* to 8*d.*, but finer teas are not plentiful, and very little really good liquoring olive S. Caper is to be had.

Indian sales are small, and what new tea is offering is well competed for, Pekoe Souchongs from 7½*d.* to 8½*d.* being ¼*d.* dearer all round, and Pekoes from 8½*d.* to 9½*d.* show similar firmness. A fair amount of old tea offering is taken less readily at, in some cases, heavy discounts for second-hand teas, and brokers and dealers alike are complaining much of the dullness of Indian teas. Ceylons offering in considerable quantities are selling well, the recent advance being well maintained. We think that buyers are not likely to gain much by waiting, as there seems no reason to expect a weaker market, at any rate for some time to come.

TERRA JAPONICA.—Of Cutch some 1,500 boxes have changed hands at up to 31*s.* 6*d.* per cwt. for selected brands. Gambier is comparatively scarce, and has again advanced. Pressed cubes realised 28*s.* 6*d.* to 29*s.*, and free are held higher. Ordinary block sells at 24*s.* 6*d.* to 24*s.* 9*d.*

TURMERIC continues depressed at almost unprecedentedly low rates. Bengal finger of usual unpicked quality offers at 9*s.* 6*d.* per cwt., and 250 packages at auction this week were bought in thereat; none of this description now ever arrives of a quality suitable for edible purposes. Madras claims little trade attention; fine finger is worth 12*s.* to 13*s.*, but common rough coated has been and may be bought as low as 7*s.* 9*d.* to 8*s.* Bulbs command relatively a high range. Of 485 bags Madras at the sales all were retained except about 50 bags hard horny finger mixed with bulbs, which sold at 5*s.* 9*d.* per cwt.

THE AMERICAN MARKETS.

NEW YORK, July 6.

THE past week has not brought with it any very new or interesting features in the drug market. The usual run of trade at this season is altogether of a jobbing character, and trade is but fair at that, the seasonable goods being the most active. For a few of these there has been a good demand, as, for example, citric acid, tartaric acid, cream of tartar, insect powder, and vanilla beans.

ACID (CITRIC).—Foreign is in good supply, and is readily obtainable at equal to home manufacturers' figures—50*c.* per lb., duty 10*c.* (1*s.* 8*d.*), in small lots, while a round lot of 25 kegs may be had at ¾*c.* per lb. less.

CHAMOMILES.—*German*, new, 1883, are in demand, and not plentiful yet, and previous arrivals brought as high as 30*c.* (1*s.* 3*d.*), and were very slightly-looking goods.

COD-LIVER OIL.—Reports of an advance in Norway have had a tendency to create a firmer feeling here, but there is little probability of an advance at this season of the year except through speculation or a very considerable advance abroad, as the demand for consumption is limited. The market is \$22 to \$28, less duty 72*s.* to 93*s.* 9*d.* per barrel, the higher price being for special private brands.

COPAIBA, having declined in consequence of new arrivals and accumulating stocks, is selling at 46*c.* (1*s.* 11*d.*) for

Central American, 50c. (2s. 1d.) for *Para* and *Maranhão*, and 60c. (2s. 6d.) for *Angostura*.

CUBES.—Although considerable arrivals have taken place recently, the market remains unchanged, these lots having been immediately taken up and distributed. Prices rule firm at \$1.75 (7s. 3½d.) for stemless and sifted, and \$1.50 (6s. 3d.) for stemmy.

INSECT POWDER is in good demand, and keeps the dealers pretty active in filling orders sold for future delivery; the tendency of the market is upward, and very firm at ruling quotations—47½c. to 55c. as to brand and quantity duty 10 per cent. (1s. 10d. to 2s. 1d.) per lb. for either imported or domestic powdered.

OILS (ESSENTIAL).—The market is quiet except for *Peppermint*, which has a decidedly strong upward tendency, and there has been considerable inquiry for case oil for export, and sales of H.G.H. have been made at \$2.75 (11s. 5d.) per lb., now held at \$3 (12s. 6d.). Oil in tin, Wayne County, New York, is held at \$2.25 (9s. 4½d.), and Western prime \$2.10 (8s. 9d.). *Citronella*, native.—Large sales reported recently at about 33c. (1s. 4½d.), said to have been as much as 15,000 lbs. *Sassafras* continues in good demand, and arrivals are promptly taken up; one lot, 1,500 lbs., sold on private terms, and the price is 47c. (1s. 11½d.) to 49c. (2s. 1d.), as to gravity and quality. *Wintergreen*, unchanged and quiet at last quotations. *Anise* remains firm at \$1.60 (6s. 8d.). *Cassia* continues firm at 72½c. (3s. 0½d.).

OPIUM.—The market has been quite steady for the past week or so, and single cases have been selling at \$2.67½ (\$1.67½ without duty=7s.), and \$2.65 in lots of five or ten cases. There has been a fair, steady jobbing demand, and quite a number of cases taken up by consumers, which has had a tendency to create a firmness in the price, but no speculative operations.

QUICKSILVER is firmer, and held at 57c. in lots, duty 10 per cent. (2s. 1¾d.).

QUININE has declined somewhat, owing probably to large stocks and the desire on the part of some holders to realise; it is obtainable at 32c. (1s. 8d.) in a jobbing way, and 30c. (1s. 3d.) would probably buy round lots of 5,000 oz. to 10,000 oz. The importations of this article are very large, and constantly beyond the demand; in consequence there is considerable difficulty to maintain an advance steadily for any length of time, and the recent London bark sales have had little effect in sustaining prices here.

ROOTS.—*Senega* is obtainable at 44c. (1s. 10d.) for prime Western, and 46c. (1s. 11d.) for Southern. *Ginseng*, somewhat scarce, and wanted and held at \$2.25 (9s. 4½d.) to \$2.50 (10s. 5d.), according to quality, much of the Western coming to market being of a light, corky character, while Southern is more rich, heavy, and solid, and will bring as much as 25c. per lb. more.

VANILLA BEANS.—There is a steady, fair trade demand, and prices have continued pretty even for some time. The range is \$3.50 to \$12 (14s. 7d. to 50s.), according to length (4 inches to 8½ inches), for prime *Mexican*, and \$2.50 to \$5 per lb. (10s. 5d. to 20s. 5d.) for good *Bourbons*. The latter-named beans are slowly growing in favour here, and the sale for them is much greater than it was a few years ago.

CINCHONA CULTIVATION IN BOLIVIA.

DR. H. H. RUSBY, of New York, whose lecture on the home of the coca leaf we reported a few weeks ago, has now also given his experiences in the cinchona districts. Like the swallow of the fable, Dr. Rusby has seen much and remembers much (or, perhaps, even slightly more). Dr. Rusby's statement, that "at the present time no bark, except an occasional bale, reaches the market from South America which is not the product of cultivated trees," is certainly far from accurate, and his description of the dreadful havoc wrought by the felling of trees in the forest to make a clearing for cinchona growing, though picturesque, to the ordinary mind savours of romancing. This is how the Doctor narrates the

story:—"The clearing process is not so difficult here (in the mountains) as upon the level ground, owing to the ease with which the trees can be made to fall. It often happens that the trees in falling will carry down immense tracts of forests with them. The place where the trees are planted is very steep. On such a place I have seen a tree weighted down with water go crashing down to a point so far below us that to reach it by the road it would occupy an entire day, whereas the tree reached the bottom in a single instant, carrying with it, not only all the trees and vines in its way, but immense masses of rock and earth, and avalanche of vegetation, blocking up the stream below."

"The trees contain a very great amount of water, and are almost completely covered by parasites. Upon a single tree may be counted sometimes from fifty to one hundred different species of plants growing as parasites, so that the trunk of the tree which might be 3 feet in diameter becomes 5 feet in diameter. The branches, which themselves are about as thick as a man's leg, become so large with the mass of vines and mosses by which they are covered that a person could very easily make his bed upon one of them, and sleep without danger of falling.

"The stripping of the bark in South America is done by contract, the price paid being from 15c. to 35c. per 100 lbs. of green bark. Arriving at the drying-sheds the bark is spread upon long narrow stretchers and exposed to the sun. In a week or ten days it is dry, and is tied with strips of raw hide into bales of from 60 lbs. to 65 lbs. each. This is the shape in which they are transported. Sixty-five pounds is a load for a man, and two of these bales is a load for a mule. Men, however, usually carry them over the worst stages, because mules are not able to endure the journey. At the repacking centre it is closely packed to go over the summit of the mountains, the transit of which requires eight or ten days, and covers an actual distance of 225 miles, costing from 15c. to 20c. per pound Bolivian currency.

From the other side of the Andes the bark has to travel another 300 miles to the port of shipment, and Dr. Rusby states that "the entire cost of collecting, drying, and transporting to London, under the most favourable circumstances, is estimated at about 1s. per lb."

"I can say, too," continued Dr. Rusby, "that from my own estimate I do not see how people can buy bark from Bolivia, bring it to this country, and get from it an amount of quinine which would not pay for the actual cost of the bark laid down in New York, leaving out of account the entire cost of manufacture. I do not see how they can get enough alkaloid from it to pay the cost of the bark itself. It has led me often to wonder whether it is not true that quinine is gradually being manufactured synthetically. I know nothing about it (which we fully believe), but otherwise I am able to explain the cheapness of quinine at the present time. The appearance of a cinchona plantation is always handsome, owing to the peculiar satiny lustre of the leaves on many of the trees of a rich purple red. When in flower, its appearance is perfectly enchanting. At such times these groves are the resort of myriads of humming-birds. I collected eight species of these birds from a single tree in an hour's time. Besides the bark the natives use the leaves and flowers. The leaves are said to be nearly inert, but infusions of the flowers produce excellent results. They also use the buds, from which they make a gelatinous mass and apply it to fresh wounds, which heal up by first intention."

SOME time ago we reported that the youngest son of the Earl of Munster had married the daughter of a Brighton chemist. The marriage was keenly opposed by the Earl and Countess, and at first there were rumours that the young man, despairing of obtaining any assistance from his father, had enlisted as a soldier. It is stated now that the Earl allows the young couple a few hundreds, and that they have gone to Australia.

Punch has apparently got hold of a pharmaceutical humourist. This month or two past the choice bits from Mrs. Ram's conversation have had quite an odour of pharmaceutical sanctity; for instance, we are told that the good lady "thinks of sending her youngest nephew to an agricultural college to study Pharmacy." It was just the other week that Mrs. Ram was telling us about the liniments of a man's face.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

Conservatism in Pharmacy.

SIR,—Mr. Ryder, of Teignmouth, might have added pil. rufus and compound rhubarb to pil. cochia, as being sold in sticks. As an apprentice in a Midland county I have worked up scores of pounds of each pill in this fashion, but was not aware that the custom extended to the West. Occasionally one meets with a very antiquated style. I knew a doctor, lately deceased, who sent out ointments in oyster-shells, and tied written directions to the neck of his mixtures.

But, sir, is there not too much conservatism in the retail trade? My impression is that there is far too much of that sentiment which lives in the past and will not tackle the living problems of to-day. Why do men sigh and groan for the good old days of long prices, fictitious values, and trading on the presumed ignorance or indifference of the public—the days when druggists were blessed with certain monopolies, and never dreamed that almost every other trade would encroach upon their preserves? Free trade, or freedom of trading, is the craze of the present time, and we have had a rude awakening to the fact. The chemist must hestir himself, and “look round,” as Yankees say. I have lately been travelling from Lancashire to Cornwall, and have been interested and gratified to find chemists in every locality making a stand for themselves and asserting their individuality and enterprise. Many have evidently purged their pharmacies of the patent medicine trade: not a showcard or handbill is to be seen. Palms and ferns, camellias and begonias, take the place of borrowed show-cases and stands “of the leading perfumers.” Models of fishing-boats and earthenware figures are rare. The names of the leading sundry houses are suppressed, or made less prominent, and articles which every grocer or store-owner may keep are relegated to back shelves. The modern wideawake fills his windows and his counters with his own goods, and emulates, in his own special department, the Universal Provider. One man handed me a circular, by which I see that he still keeps patent medicines “so called,” but sells them under protest, and “without being able to guarantee that they will be found serviceable.” This gentleman is able to induce his customers in many instances to buy something “reliable” instead. In another locality I met with a case of modern ideas *versus* conservatism which was very instructive. An elderly man took into partnership his son, who was determined to go ahead. But the old chemist could not be induced to push the new articles, meekly saying to his customers, “My son says they are good.” But the younger man persevered, and the firm is flourishing. In numerous cases, as old connections die out the business fails from sheer conservatism and a dislike to put on a new face before the public. The danger of the new style of business is the immorality of substitution of one article for another without a clear understanding on the part of the buyer; of charging a higher price, when one thinks the customer does not know enough; and of printing a price on the nostrum, but advertising it at a reduction. Let a chemist reserve to himself a right to a credit price, but be fair and square to the cash buyer. And if our richer brethren would kindly bear in mind that by giving long credits they are doing us an injustice in our attempts to do a cash trade, we should be happier in the exercise of our vocation, and, if

the word of commercial travellers is to be believed, would be better prepared to pay up as we go. Yours truly,
HEDER. (94/42.)

The Irish Pharmacy Amendment Bill.

SIR,—According to last week's report of the monthly meeting of the Irish Pharmaceutical Council, the members are very hilarious over their Amended Bill as it comes from the House of Lords; and no doubt they have reason to be so. Yet I think they should not be quite so sanguine, for they must remember that they will not be able to bias the minds of a Commons Committee so easily as they have undoubtedly done the Lords one, and this must be their Bill's destination if the members of the chemist and druggist craft will only take the pains of writing individually their objections to the Bill to their representatives in the House of Commons. I should like to urge chemists each to frame his objections to the best of his ability, and let them be sent off at once. We in the North will do our best to throw out the Bill, but it requires a great deal of opposition to do this, and can only be accomplished by hearty co-operation. The President of the Pharmaceutical Society states the Lords Committee sat for two days after hearing evidence, and during that time the members of the pharmaceutical deputation remained in attendance, and were frequently called in for the purpose of consultation. Might I ask where were the members of the chemist and druggist deputation, and why take evidence from one side or other after the Lords had closed their inquiry? This must be made a note of, and I think a question at least should be asked in the Commons *re* the same.

Mr. Allen is reported to presume there should be both “arts and chemical examiners.” This is the modified examination the Irish chemists and druggists may look for, if the Bill becomes law. The chemists and druggists will require to be very careful, and must use their utmost powers to destroy the Bill, unless the two-thirds of same have no desire to remain in business (not to speak of the amount of inconvenience to be thrown on the country), since virtually no one in business on his own account will have time given him (according to the Bill) for a rubbing up on subjects in most cases long forgotten. Let each of us look the matter boldly in the face, and realise at once the grave position we are about to be placed in—called upon to pass an examination framed by a body whose whole term of office has been spent in trying to put us out of existence. Think you when such has been their action in the past, that now the master-key is in their hands they will not exercise their authority to our destruction? They have already done so to the best of their ability, and undoubtedly will do so in the future, if we allow them to get their Bill passed; and, lastly, I may mention I am informed by good authority that legally the Pharmaceutical Society cannot compel any person who has gone into business as a chemist and druggist since 1875 to pass any examination whatever, since they had established no such examination prior to his entering said business on his own account. Hoping this may be the means of stirring all up on a matter of vital importance,

I am, yours obliged,

Belfast, July 16.

JOHN H. SHAW.

“The Just Demands of the Trade.”

SIR,—Your correspondent, “O. D. Major” (July 7), fails, I think, just where many writers in your columns have done before him, in not formulating any practical scheme. Like himself, I have watched your correspondence columns, and noted various ideas thrown out from time to time. But no one has suggested, so far as I can recollect, anything really feasible to help us out of our difficulties.

Certainly the indifference and lethargy of the vast bulk of our *confrères* is disheartening. Can we really hope to get at the true feeling of the majority of the trade? Judging from the past it appears hopeless, and, until we can accomplish this much, any united action seems out of the question. The ordinary Englishman needs something like a “panic” to rouse him; it would look as if it were so with us.

I am in favour of the following questions being dealt with:—(1) Sale of poisons; (2) dispensing by doctors and surgeons; (3) patent medicines; (4) Patent Medicine Stamp

Act; (5) co-operation as regards supply of drugs, chemicals, and patent medicines; (6) early closing. I trust the trade will see its interest to rouse up and act.

POTASS. IODID.

Misleading Information.

SIR,—Allow me to call your attention to an article printed in "A Thousand Ways of Earning a Living," by *Tit-Bits*, on chemists. It is most misleading from beginning to end. It commences by recommending the "trade" to women as a "most profitable opportunity of investing their money," and goes on to say that the three years' apprenticeship can be fulfilled at a "college"!

It gives the fee for the daily lectures at Bloomsbury Square at 4 guineas, and finishes up by saying that "the theoretical and practical studies made during apprenticeship are generally sufficient to enable one to pass the exams." If this work expresses the public opinion of our craft, no wonder we hear so much about "dissatisfied apprentices" and "un-qualified managers." The qualification of the chemist would seem to be of no value to the outside world beyond the amount of money expended in capital in starting business.

Yours sincerely,

A YOUNG PHARMACIST. (91/16)

Phonetic Pharmacy.

SIR,—Already I have had made to me inquiries concerning the good of such exercises as you have been kind enough to give out with the prizes attached, combined with special objections to "phonetic pharmacy." Whatever some may say, I think to those who live in and by retail pharmacies, such exercises are of more real value than exercises out of Caesar or Virgil. What could be more fitted to conduce to a ready understanding of such requests as two pennyworth of "steel and cold chicken" (colchicum), three pennyworth of "down in the cellar" (citronella), half a pound of "wingig" (fenugreek), and the countless forms of misspelling of which I enclose a few examples. Some people never seem to read the labels constantly attached to bottles and parcels, and hence, I think, arise many mistakes for which the chemist alone is too often blamed. For instance, a friend of mine, while serving a "lady" barmaid, was rudely interrupted by a request for a pennyworth of "sippety powder," from a lad. "Ah!" said she, "it's for the head, isn't it?" "Yes," was the reply, given rather hesitatingly. "Oh, then, I want two packets." Two packets were given, both plainly labelled "White precipitate. Poison." The lady went home, mixed the two packets in a glass of water, and drank it off. Result: a visit to Westminster Hospital, a great deal of bad language, and the loss of half a day and the custom of the "lady's" friends to the seller on account of carelessness! Truly one is often

HARD PUSHED. (93/40.)

Glycerine and Lime-juice.

SIR,—Reading in your journal that some are in need of a recipe for "glycerine and lime-juice," I beg to submit the following:—

Lanolin	5 drachms
Glycerine of starch	2½ "
Borax	2½ "
Spermaceti	2½ "
Glycerine of borax	10 "
Lime-juice	10 "
Oil of sweet almonds	10 oz.
Aque	7½ "

Mix.

Rub the first three ingredients in a warm mortar till mixed, then add almond oil and spermaceti, previously melted together at a low heat, and again mix; pour the mixture into a bottle, adding the water (which should be slightly warmed), shake till an emulsion is formed, and then add the glycerine of borax and lime-juice. Perfume, q.s.

This makes an inseparable cream.

am. yours truly,

EDINBURGH JUNIOR. (90/57.)

A Veterinary Consultation.

SIR,—Could you inform me what would be the best to give to a cow which has been down sixteen weeks? It commenced with milk fever. So far I have prescribed fever drench, containing antim. tart. and potas. nit., with tonic powders. This was at the commencement of the attack; since then I have applied a large plaster along the spine, and also a blister, but very little good has resulted from the treatment. The cow can turn itself over and use its fore feet, and sits on its haunches like a dog, but appears to have no use in its hinder parts, and can eat as hearty as any cow; everything has been done that can be done in the way of good nourishment. A little help in this matter from anyone will be very thankfully received, as the cow is a very valuable one.

W. GREAVES.

[The cow is suffering from paralysis. Milk fever, so called, is apoplexy of the spinal cord, and the loss of control of the hind legs is the usual temporary result. Of course the seat of pressure makes a difference to the degree of paralysis produced, and if it occurs where the nerves which supply the heart and lungs with motor power, then paralysis of those essential organs produces death. In our correspondent's case there is doubtless a clot that has failed to be absorbed, or else the less hopeful condition of softening or other degenerative change in the spinal cord.

We have known cows to remain on the ground a very long time without making an effort to rise, and yet they have made a perfect recovery when given mechanical assistance. It is not so usual to "sling" cows as horses, but it has been done with so much success that we would strongly recommend trying it. If no proper slings are obtainable, almost any practical farm hand can rig up a substitute by sewing strong sacks or hop-pocketing on to two stout ash poles about 5 feet long, with a spanner 3 feet long to cross the centre. Ropes and pulleys complete the apparatus if the building is high enough; if not, or if the cow is in the open, three poles can be put up after the manner of a gipsy's camp-kettle holder, and when braced they will sustain any weight you can put upon them, without making any holes in the ground for their reception.

As to medical treatment, we should advise repeated applications to the whole length of the spine of lin. camph. co. and ol. camph. P.B., and also give the following:—

Liq. strychnine	3ss.
Quinine sulph.	3ij.
Tinct. gentian co.	ij.
Aq. ad op.	

Ft. haust. Bis die.

When the cow has been slung so as to get her feet to touch the ground, she should be smartly hand-rubbed all up and down the legs, and encouraged to put her weight on the ground by degrees, propping her up with stuffed sacks and preventing abrasions. Do not expect her to help herself immediately, or abandon the effort because she does not at first try to stand.]

Cleaning Bottles.

SIR,—I have found treating oil bottles first with potash and water, and then rinsing them with a little methylated chloroform, answer the purpose. He will have to consider how far he can go with the cost of the chloroform, but chemists generally do not allow anything for oil bottles. If the bottles have been laid aside for some time they are harder to clean, but if fresh they are easily cleaned.

J. K. (88/13.)

Let "Country Chemist" try coarse brown paper, torn into small pieces, a little liq. potassæ and warm water.

Worthing.

JAMES BURT.

My plan is: Dissolve ½ lb. of crystal carbonate of soda in 2 or 3 gallons of boiling water, place the bottles in a tub, and pour the water over them, with as much more as will quite cover the bottles. Allow to soak until cold, brush out, place each bottle as brushed in another tub of hot water with soda, and wash them out again, using plenty of soap and a fresh

brush; finally wash out with clean tepid water, and set aside to dry. CACODYL. (88/19.)

Linimentum Terebinthinæ.

SIR,—In a letter written by Mr. S. W. Heaton, November 23, 1888, he refers to a paper written by Mr. Conroy, on "Linimentum Terebinthinæ," B.P., and Mr. Heaton gives his experience in making the liniment. I tried to make some time ago, and succeeded well, and the bottle containing the liniment has been standing two months, and is quite inseparable now. I dissolved the camphor (Howards' flowers) in the turpentine (commercial), and instead of triturating the soft soap in the mortar with the water, I heated it in a porcelain evaporating dish, and whilst hot poured it in a large mortar, then added the turpentine, a little at a time, seeing that each addition was thoroughly incorporated. The result was a splendid emulsion, which would please the most fastidious pharmacist.

Yours, &c.,
TERRA REGINA. (287/8.)

L'Affaire Dunstan.

SIR,—Allow me to thank Mr. Storey for the firm stand he is taking in L'Affaire Dunstan. The sooner we have more such gentlemen showing up what our Council can do, will do, and persists in doing, in committee, the sooner we shall have a Council who will look to our interests fearlessly, and abolish all committees where publicity especially is required.

Yours faithfully,
SUBSCRIBER. (95/7.)

SIR,—A medical friend of mine in the country recently sought help in chemistry from a student who had just passed the Minor, having been a Bloomsbury Square student. On coming across the term *Thiosulphates* he expressed his ignorance of them, or to what that term referred. Is it possible that this Minor-diplomaed man can have been one of Professor Dunstan's students? If so I think such ignorance is lamentable.

Yours faithfully,
JUSTITIA. (93/11.)

The Unqualified's Soliloquy.

To sit, or not to sit, that is the question:—
Whether it is better in the mind to suffer
The pains and penalties of unexamined men;
Or to join the Pharmaceutical,
And, by "passing," end them?—To cram,—to grind,—
No more;—and, by passing them, to say we end
The heartache, and the many griefs and shocks
The unqualified is heir to,—'tis a consummation
Devoutly to be wished. To coach;—to cram;—
To grind? perchance to pass;—Ay, there's the rub;
For in that test what man in power may come,
When we have shuffled on in mortal fear
And us to pluck.
For who would hear the sentence "of the chair"
That sends him back to grind and then to try again,
When he could his own living make
By taking up a "branch" and struggling on?
For who would cram and wade thro' wearying "Texts"
But that the hope of passing the "Exam."—
The dreaded room, to which so many come
And then return,—is 'fore his mind,
And makes him thro' the hated ordeal go
That he may beat his neighbours in the path?
Thus business doth make rivals of us all;
And so the native kindliness of mind
Is sicklied o'er with jaundiced thoughts of gain,
And businesses of great and growing size,
With this regard, their "branches" spread afar,
And lose or gain, as chance may bring.

May 30. SODA CARB.

Somerset House Spies.

SIR,—I have never been visited by one of these gentry, nor have I any fear of the result of a visit; but it has struck me

that it would be a good thing if chemists who have had dealings with them would announce the fact in your widely circulated journal. For instance, I heard of one who was "doing" South Wales a few weeks ago. Travellers occasionally meet with them, and are able to warn us in time. I beg to suggest that you invite your correspondents to inform you of their presence. HEDER.

Filtration Ideas.

SIR,—Your subscriber "Cascara" wants ideas concerning the filtration of ext. cascarae sagrad. liq. In making large quantities it never should be subjected to filtration. The only satisfactory prelude to a good preparation is to allow it to stand in pottle bottles for two months until subsidence of all matter has entirely and thoroughly taken place, and then pour off the clear liquor. The result is highly satisfactory, and the loss is exceedingly small. Yours faithfully,
Reading. F. W. HOOD.

The Chamberland-Pasteur Filter Company wish us to state that their filter is adapted for this purpose.

Opoponax Perfume.

SIR,—In your reply to "Amateur" (page 326), the statement is made that opoponax perfume has "nothing to do with the gum of that name." Its nearest relation, the "oil" or "otto" distilled from it, has, however, for the use of the same in Piesse's opoponax is doubtless what makes it stand far above its many rivals, and, as Piesse says, "gives a peculiar character to the whole." His formula is as follows:—

Pod. musk	.. .. .	1 oz.
Vanilla beans	.. .. .	8 "
Tonquin	.. .. .	4 "
Infuse 1 month in spirit, 60 over proof, 10 pints. Then add—		
Tinct. orris	.. .. .	4 pints
Millefleur essence from mixed pomades	.. .. .	8 "
Citron zeste	.. .. .	2 oz.
Bergamot	.. .. .	2 "
Otto rose	.. .. .	1½ "
„ opoponax	.. .. .	½ "

Yours, &c.,
ALF. (85/21.)

[“When opoponax was first introduced as a perfume,” says Piesse, “it was very generally abused by those who had smelled it, but said it was nasty because they read it was so described in a Bloomsbury journal. No perfume ever made, eau de Cologne excepted, *has ever had a larger sale*.” Alf.] does not, surely, suppose that the formula which he quotes can have any connection with the sentence which we have italicised? Opoponax may grow in Sicily, nevertheless pharmacognosists are very doubtful about the source of the gum resin which now occurs in commerce. There is, however, a legend in Mincing Lane that it grows in Houndsditch, in the City of London, and that Polish Jews are the cultivators thereof.]

Irish and British Certificates.

Justitia (89/62) in a letter which he sends denouncing the Pharmaceutical Society for “pouncing upon Mr. Neeson,” a licentiate of the Pharmaceutical Society of Ireland, whom the British Society recently successfully prosecuted for selling poisons in London, advocates an interchange of the certificates of the two bodies. “I do not mean to say,” he continues, “that the Pharmaceutical Society ought to accept the Irish diploma unless the Pharmaceutical Society of Ireland will accept the English certificate; but I do say it is unjust to an Irishman to have to pass not only the English Minor but also the Preliminary before he can commence business on this side of the Irish Sea.”

MEXICANS appear to appreciate good things, for according to the representative of a United States house “the demand for the very finest and purest drugs comes from Mexico. The Mexican invariably demands the best of everything, regardless of cost. Quality is the first desideratum.”

LEGAL QUERIES.

86/55. *H. T.*—The label which the Board considers to be liable is so because proprietary right is claimed by the use of your name in the possessive case. The label for the "Mixture" does not claim either proprietary right or recommend the preparation for the cure of disease, and for these reasons does not render the mixture liable to stamp duty. The Board have, however, informed you that other things may render the mixture liable. From your pamphlet we extract the following sentences which certainly do:—

"A mixture, prepared according to my prescription, will undoubtedly be found the best internal remedy for gout in all its forms. Three or four doses will often remove the most severe pain in the course of a few hours and if continued according to directions will effectually cure in a very short time."

There are many other such sentences in the book. It is true that you give the prescription, but that does not alter the case, for notice how you give the prescription:—

Potassii bicarbonas	12 grains
Extract of "guaiacum sanctum" .. .	5 "
Fluid extract of "barosma betulina" .. .	10 minims
Compound tincture of "citrus vulgaris" .. .	30 "
Compound decoction of "sassafras officinale" add to	2 oz.

Mix, and make one dose.

Then you state "that great difficulty will be experienced in having the above prescription accurately dispensed, owing to the fact that the vegetable ingredients contained therein are not in every-day demand, neither do chemists keep the said extracts and decoctions ready for use. . . . To avoid delay and inconvenience," you "strongly advise all who wish to place themselves under this treatment to send to you direct for the medicine." Further, the dose of the preparation which you sell is two teaspoonfuls. Although you do not here expressly state that chemists cannot dispense the prescription, you say that the medicine in the concentrated state can only be obtained from you, and you also expressly state that you hold the secret of the preparation of it. For these reasons the medicine is liable to stamp duty.

The Board of Inland Revenue and Pamphlets.—In a letter which a correspondent of THE CHEMIST AND DRUGGIST has received from Somerset House, June 1888, the following passage occurs:—"As liability to medicine-stamp duty depends on many circumstances, and may be incurred in other ways than by the use of a particular label, I enclose for your information extracts from the Acts of Parliament which impose and regulate the duty in question. I have to add that whilst the Board are always ready to advise on labels and handbills submitted to them, they cannot undertake to deal with the pamphlets forwarded with your letter. You must be guided by the above-mentioned extracts and the observations thereon."

89/6. *Scotus* is offered an agency for sheep dip, and asks, if a customer purchases a supply from him and it is found that the dip is injurious, can his customer take damages off him, or is the manufacturer alone responsible?

[The customer would have to sue *Scotus* in the first instance, and if damages were awarded *Scotus* might recover from the manufacturer afterwards; but he would find it very difficult to prove conclusively that the dip was in the same condition as when supplied to him.]

93/35. *Registered Chemist.*—If your name has been on the register, and in consequence of your own neglect has been struck off, you can get it re-inserted; but you will have to pay a fine (a guinea or thereabouts). If you have never been registered, but can produce the requisite evidence that you were in business as a chemist and druggist before August 1, 1868, you will be placed on the register on application and payment of a fee of five guineas.

92/16. *Jam.*—It is quite legal in ordinary cases for an employer to dismiss an assistant by paying him a month's salary.

92/16. *Ink Bottle.*—We should not consider that a dozen bottles packed in a case without a lid would be in a proper condition to be sent by rail, and we should consider the Railway Company quite justified in refusing to carry it except at owner's risk.

92/40. *A Subscriber.*—It is under the 15th section of the Pharmacy Act, 1868, that an unqualified assistant who sells poisons is personally liable to a penalty of 5*l*. Under the 17th section (but only for purposes of that section) the person on whose behalf the sale is made is responsible for the transgressions of his assistants. This is not our opinion; it is the interpretation of the law which has been laid down by many of the most eminent of our judges.

93/36. *J. J.*—It is well known that many unqualified shopkeepers sell "paregoric sine opio," or non-poisonous paregoric. The danger involved in such sales is obvious, and has often been pointed out; but it is not at all certain that they are illegal. In Sheffield prosecutions under the Sale of Food and Drugs Act for the sale of "paregoric substitute" or "paregoric sine opio" have taken place, but the prosecutors have failed to satisfy the Courts that any fraud has been committed. There is no unquestionable standard for "paregoric." It means simply a soothing medicine; and the magistrates have declined to convict a vendor who has sold one soothing compound instead of another.

90/49. *W. G. P.* asks:—"What legal right has the Pharmaceutical Society to re-examine students in subjects in which they have previously passed?" [The Society has not at present the power to divide the examinations, and the condition implied in the question means division. One of the objects of the Bill now before Parliament is to give power for dividing the examinations into parts, but it is not contemplated to allow a candidate to pass in the subjects piecemeal.]

93/54. *W. H. S.* asks:—"Are consignors bound to label as 'dangerous' or 'inflammable' such goods as collodion or ether, even though forwarding companies (rail and steam) have quoted a special rate?"

[It is only necessary to bring the nature of the substance clearly before the carriers *in writing* in the case of a railway, but the goods must in addition be marked outside the package in case of being sent by sea. The words of the Railway Clauses Consolidation Act, 1845, section 105, are:—"If any person send by the railway any such goods (*i.e.* dangerous substances) without distinctly marking their nature on the outside of the package containing the same, *or* otherwise giving notice in writing to the bookkeeper or other servant of the company with whom same are left at the time of so sending, he shall forfeit to the company 20*l*. for every such offence," &c. The Merchant Shipping Act, 1873, section 23, provides that, "If any person sends or attempts to send by any vessel, British or foreign, any dangerous goods without distinctly marking their nature on the outside of the package containing the same, *and* giving notice in writing of the nature of such goods, and of the name and address of the sender or carrier thereof, to the master or owner of the vessel at or before the time of sending the same to be shipped, or taking the same on board the vessel, he shall for every such offence incur a penalty not exceeding 100*l*."

90/22. *C. H. G.*—We should think it likely that an announcement in your window that you are selling "Powders equal to Fennings'" would very likely render those powders liable to medicine-stamp duty. It would be obviously unfair if it did not do so. Moreover, it is not impossible that Mr. Fennings might be able to obtain an injunction against you.

95/4. *Homœopathic Chemist.*—Homœopathic medicines containing a quantity of a scheduled poison which can be appreciated by analysis are subject to the regulations in regard to their sale laid down in the Pharmacy Act.

90/40. *Raithby* has been the manager of a business, and has introduced during his managership the sale of certain preparations made from his own formulæ. He had thought of succeeding to the business, but has now abandoned that idea. He asks if he is bound to leave copies of his recipes with his master?"

In the absence of an express agreement the master would not be entitled to the recipes of his manager. The case is analogous to that of a servant inventing an article, in which case it has been held that the servant, and not the master, is entitled to the patent. If our correspondent has entered the recipes in a book provided by his master, the master is entitled to the book. If, too, the articles have been sold with the label of the master, the property in the title belongs to him (the master). The manager, however, is certainly not bound to leave copies of the recipes with his master, and might succeed in obtaining an injunction in case his master attempted to take them without his consent.]

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Dispensers who have compounded any of the following prescriptions, or similar ones, are requested to communicate their results to the Editor.

Salicylate Mixtures.

SIR,—With reference to the mixture of sodæ salicylat. et pass. bicarb., stated by "Bos" to have been prepared of a brown colour, I beg to say that some time ago I dispensed a mixture containing sodæ salicylat. et magnes. sulphat., which, when prepared, after standing for a time turned quite dark in colour. After considering the matter I thought the darkness might be caused by tarry impurities contained in the artificial salicylic acid with which the salicylate had been prepared. I therefore dispensed another bottle, using, instead of the "artificial," Schering's salt, prepared with the natural acid obtained from oil of wintergreen. This, after standing, did not darken in colour, being, I think, proof positive that my assumption was correct. Possibly our friend's anxiety is due to a similar peculiarity. Yours truly,

Lansdowne Road, Clapham, July 16. A. BALL.

Ferri Citras c. Strychniâ.

SIR,—What should be the colour of a mixture containing ʒiij of this preparation, in an 8-oz. mixture, with syrup and chloric ether?

Yours truly,

HEDER.

Alkaloids and Hamamelis.

SIR,—Should the following, when dispensed, be clear or give a slight precipitate:—

Tr. hamamelidis	3ss.
Cocain. hydrochlor.	grs. x.
Aquæ laurocerasi	3ss.
Morphiæ mur.	grs. iij.
Acid. carbolic.	gtt. iij.
Aquæ puræ, ad	3iss.

Fiat applic.

Yours truly,

MINOR EXAM. (91/37.)

93/4. *Cymro*.—"A dessertspoonful every four hours" is apparently intended.

90/70. *Acacia*.—Liquor. Ergotæ Ammon. and Liq. Ferri Perchlor. cannot be dispensed together in a mixture without the formation of ferric hydrate. In the mixture which you had, mix half of the mucilage with 4 oz. of peppermint water, and add the iron solution to this; then mix the got with the rest of the mucilage and water, and add to the iron mixture.

93/28. *E. J. Godwin* sends a prescription which he had for the pills, 15 grains of Hyd. Perchlor. being one of the ingredients. On consulting the prescriber, he was informed that the subchloride was meant! The prescriber confessed that "he was accustomed to write 'calomelanos,' and that he became confused when using the newer term." The prescriber should be thankful that his prescription got into the hands of an intelligent dispenser. Fatal results have more than once followed such slips.

93/10. *A. C. E*—(1) "Fiant pulveres No. viij." means that the ingredients are to be made into eight powders. Three grains of powdered opium were ordered, and the directions were "one every three hours." Had you done otherwise than divide the ingredients you would not have been in the position to ask us the question so complacently. (2) You are not justified in substituting powdered gentian for extract of gentian in pills.

91/37. *Minor Exam*.—The prescription containing sodium hyposulphite is a very irrational one, and the best way to dispense it is simply to powder the hyposulphite and mix with the tinctures.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ which have already been published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

81/50. *Terra Regina* (Queensland).—(1) To improve the taste of Rain-water for drinking purposes, it should have added to it a proportion of whitening, say a pound or more to each tank of the water. If some harmless aquatic plants could be grown in the tanks in presence of the chalk, the water would gradually become aerated, and so be charged with more of the carbonate of lime than it could otherwise take up. You, as a chemist, should of course make the most of the circumstance that the water causes decay of the teeth. The remedy for that is to sell carbonated lime-water (aerated carara water, as it used to be called) as a table beverage, and for the children Parrish's syrup. (2) *Mange in Horses*.—Try either of the following applications:—(a) Huile de cade, coal tar, soft soap, and oil of turpentine, of each, 4 oz. by weight; benzine, 10 fluid oz. Rub the soap and tar together in a mortar; then add the huile de cade and the turpentine, and lastly the benzine. (b) Sulphur, 8 oz.; turpentine, 2 oz.; strong blue ointment, 2 oz.; vaseline, 1 lb. Melt the vaseline, and rub down the sulphur with the half of it; then add the blue ointment, the rest of the vaseline, and lastly the turpentine. Either of these to be rubbed in at night for four or five days, then the spots are to be washed with soap and water. (3) *Worm-eaten Drugs* should not be used, even although the supposition is that the worms have only eaten the starch. In the case of the ginger root which you mention, we take it that the original drug was of African origin, and that would account for the darkness of the tincture. It was quite natural for the watery percolate, which followed the displacement of the spirit, to be dark and soluble, for it would contain practically none of the resinous pungent principle. Your idea of selling it as "soluble essence of ginger" was rather original, but we are sorry for the purchaser.

88/44. *T. C.*—Magendie's Solution of Morphine:—

Citric acid	25 centigrammes
Morphine	50 "
Distilled water	25 grammes
Tincture of cochineal	5 "

Make a solution. Dose, 5 to 15 drops (8 drops=about 1 centigramme of morphine).

88/47. *Morph. Mur.* has accidentally mixed about 3 oz. of morphine hydrochlorate in powder with 8 oz. of potassium bromide in crystals. How is he to recover the morphia?

[The easiest and, on the whole, the most practical plan is simply to sift the mixture carefully. Most of the morphine hydrochlorate will in this way be obtained. To free it from any particles of potassium bromide, dissolve in twice its weight of boiling water, and stir constantly as it cools. Collect the precipitate, and drain off the mother liquor which contains all the bromide and only a little morphine. Then dry the morphine precipitate on blotting paper placed on flat pieces of stucco in a warm place.] (2) See Vol. 31 for formulae for Lime-juice Cordial.

88/48. *Pizz* sends us a price-list of "finest East Indian sherbet," sold by a City of London firm wholesale in quantities of 14 lb. and 28 lb. parcels and 1 cwt. kegs at 50s. per cwt., packages free, cash discount 2½ per cent. How can it be made so as to yield a profit, asks *Pizz*, and is tartaric acid used? We presume that the makers buy at first hands, so that they will have advantage in price to begin with, e.g. :—

	£	s.	d.
33 lbs. bicarbonate of soda at 5. per cwt.	=	0	1 5
30 " tartaric acid at 1s. 6d. per lb.	=	2	5 0
126 " sugar at 20s. per cwt.	=	1	2 6
Oil of lemon, say		0	0 7
			9 6

That is, 189 lbs. for 69s. 6d., or 40s. 8d. per cwt. The margin is a good one for large dealers, and it will be larger if they buy the ingredients in ton quantities for cash.

85 31. *Cortez*.—If you heat the silver articles which have been coated with mercury, the latter will be volatilised.

70/46. *J. Mc.M.*—The After-dinner Pills which you send are an ordinary pill, the composition of which closely approximates with the following formula :

Pulv. rhei	gr. ij.
" aloes Socot.	" ss.
Podophyll. resin.	" ʒ
Extract. glycyrrhiz. q.s. w/ flat pilula.	

74 51. *Perplexed*.—The mixture which you send does not contain acetate of ammonia or any other inorganic substance in appreciable quantity. Judging from your remarks, and the odour and taste of the mixture, we may suggest that it simply contains drop doses of tincture of aconite, which almost invariably give quick relief in pleurisy and other inflammatory disorders.

85/19. *Secundum Artem* sends a salve which one of his customers speaks highly of as a remedy for Skin Diseases. This is an extensive field for a salve to cover, and we must ask correspondents who send samples to be more explicit regarding them. S. A.'s salve is pink (the colour being due to carmine) and the odour is camphoraceous. The following formula will furnish a similar preparation :—

Bismuthi subnitrat.	5j.
Camphoræ	gr. x.
Carmin.	q.s.
Ung. simplicis	3j.
fiat unguentum—"secundum artem."	

(2) *Mona Bouquet*; the formula remains in the Isle of Man.

88/37. *Nemo*.—The Shaving Cream which you send is the ordinary almond cream. There are various ways of making it, but the following is the simplest :—Take two four-penny cakes of honey soap, and shave into shreds; mix with the shavings 4 oz. of water, and heat on a water-bath until the whole is uniform, pour the warm soap into a large hot mortar, and mix with it white wax and spermaceti, of each ¼ oz.; almond oil, ½ oz., previously melted by heat; stir until

the mass takes on a smooth and pearly appearance, and flavour with essential oil of almonds. (2) We cannot afford space at present to describe how old engravings are restored.

79/50. *Constantinus*.—The ingredients of your Cattle Spice, as near as we can make out, are :—Ground locust beans (50), linseed cake (50), coarsely-ground liquorice (4), gentian (1), fenugreek (3), and cumin (1). The figures are suggestive proportions for you to follow.

88/22. *Nemo*.—It is impossible to say what the ingredients of the mixture are.

90/5. *Cheval* sends a sample of a Lotion for Horses' Knees. He says that it has been found to be very useful for broken knees, contracting the wound and healing quickly. Sulphate of copper is the active ingredient, but the lotion also contains the odorous principles of benzoin. We suggest the following method for making a similar preparation :—

	Oz.
Sulphate of copper	1
Benzoin (in coarse powder)	2
Water	40

Boil together in a covered vessel, and filter bright.

88/65. *Adare* sends a sample of a Tasteless Purge (Veterinary) for horses, cattle, and dogs. It is in the form of a red-coloured powder, and the special advantage which is claimed for it is that by using it "the risk and trouble of balling a horse is avoided." Our examination shows that the active ingredient is powdered croton seeds, and the colouring-matter red sanders wood (apparently). The proportions may be as follows :—

	Grains
Powdered croton seeds	25
Red sanders wood	30
Powdered croton seeds	35
Red sanders wood	30
Powdered croton seeds	45
Red sanders wood	30

Directions : Mix the powder with a handful of dry bran, and stir into a cold bran-mash. Give the medicine in the morning before feeding or watering, or, when the horse is off his feed, give the powder in gruel from a bottle.

89/36. *Lipsalve*.—Remedy for Mange.—Your conjecture is pretty near the mark. We make the preparation to be—

Sulphuris nigri	3ij.
Olæi cadini	3ij.
Spiritus picis, ad	3j.

Misce.

The remedy is a good one.

85/34. *Rex*.—A good Powder for Tender Feet is the following :—

	Oz.
Powdered olente of zinc	1
" boric acid	2
" French chalk	3

M.

83/29. *C. D.*—The only sure thing for darkening a straw-coloured moustache is the silver dye. We gave a formula for one on page 856 of our issue of June 30.

84/25. *J. B. D.*—We have never had any difficulty with the enamel stopping given on page 604 of last volume; if it has any fault at all, it is that it sets too quickly. We prefer, however, a good guttapercha stopping, which does not wear away as the enamel does.

80/72. *Pompeii*.—A Horse Blister made of red iodide of mercury, 5j, lard, 5j., coloured with red bole will, perhaps, suit your purpose.

33/9. *Radix*.—Baillière, Tindall & Cox publish a series of anatomical plates, coloured and figured, which would assist in the study of physiology.

39/8. *T. H. & Co.*—Nutrient Suppositories are made with peptonised extract of meat, 10, 15, and 20 grains or more in each suppository. The basis is generally a gelatine cube—for example, gelatine, 10 parts; water, 15 parts; and glycerine, 15 parts (all by weight), digested together in a water bath. Take the same weight of this basis as the peptone, then, melt over a water bath, dissolve the peptone in it, and make into suppositories.

37/67. *W. Quick*.—We understand that you wish to keep the fruit whole and without the addition of syrup. If so, pack the fruit in jars with a layer of cotton wool on the top, upon which sprinkle some chloroform. Then close the jars perfectly so that air cannot enter. This plan is said to be very successful.

89/38. *Ap Thomas*.—With the exception of salicylic acid, which is more powerful as a preservative and also in physiological action, boric acid is the most suitable preservative agent for general use with foodstuffs.

89/20. *Asprant*.—Tripe-dressers immerse tripe in hot milk lime in order to impart a white colour to it.

89/61. *L. Bristol*.—The patentees of the new bottle-making machine are Messrs. Sykes, Macvay & Co. (Limited), Hatfield, Yorkshire.

84/15. *Taffy*.—The loss of the letter which you received from the secretary of the Pharmaceutical Society intimating that you have passed the Preliminary Examination does not affect your registration as a student, and if you write to the secretary he will give you a note stating that you are a student. The original letter is not a certificate.

84/46. *Mortar and Pestle* asks:—"The strength of Extract Hamamelidis Liquid, B.P.C., is 1 in 1; how does it compare with the solid extract? Say what quantity of this liquid extract would 1 oz. of the solid extract be equivalent to. (2) How much Sapo Durus should dissolve in a pint (20 oz.) of equal parts of S.V.R., 60° O.P., and distilled water, to remain in solution in winter weather?"

[Some one who has made the necessary determinations will perhaps reply.]

84/21. *Diffidens*.—For Soft Corns between the toes try the application of salicylic collodion or sapo mollis, B.P., 5iv., acid. salicyl., gr. xx. To be applied on a piece of lint every morning.

86/13. *H. J.*—Weak tincture of iodine imparts a good Hipsy Colour to the Skin without harming the skin. The tain can afterwards be removed with solution of hyposulphite of soda.

85/42. *Communication*.—Your last question was not intelligible. What you require is a solution of hard paraffin in benzene. Coat one side of the copper plate in this, and that side will be unaffected in the electro-plating process. Or you may heat the plate, and rub one side of it with the hard paraffin alone; but the other method is more thorough.

S. H.—The addition of a few drops of solution of aniline violet (1 in 20) will give the syrup the proper colour, and will be harmless.

Books.

87/70. *Saxon*.—Clater's "Horse and Cattle Doctor" is considered to be the best book for chemists. It is published by Warne at 21s. Mr. Silverlock publishes a number of stock-books; please consult his advertisement in this journal.

84/66. *Iodoform*.—Barnard Smith's "Metric System" (Macmillan, 3d.).

92/52. *Hederal*.—The best book (suitable for chemists) on venereal diseases that we know of is Hargreaves's "Manual" (R. Kimpton, 126 Wardour Street, W., 5s.).

90/52. *R. S. A.*—Ince's "Latin Grammar of Pharmacy" (Baillière, 4s.), is a book which will suit you.

91/69. *Pyxides*.—Get an application form from the Trade Marks Office, Southampton Buildings, Chancery Lane (costing 5s.), and, if your application is accepted, you will have to pay a further fee of 20s.

89/37. *Niger*.—There is no secret about the marking-ink used by shirt-makers. It is similar in composition to that of which we gave a formula a week or two ago, and they ensure complete reduction of the silver by using a sufficiently hot iron. We have specimens of writing done with this ink which are perfectly legible after ten years.

92/48. *Chemicus*.—Ammonio-citrate of iron and malaga are said to be the principal constituents of Dusart's Iron Wine.

92/66. *R. J. W.*—We have inquired regarding the coater and are informed that it works unsatisfactorily when it is held vertically. It should be held at an angle of 45°.

88/60. *Desdichado*.—The author of the work referred to died some years ago.

91/6. *Gentian*.—When a winchester of strong solution of ammonia is broken in the shop, the best plan is to open all windows so as to create a draught, then clear out. Hydrochloric acid is unsatisfactory for neutralising the alkali, because it would fill the shop with ammonium chloride vapour, and this would take a long time to settle. It would be better to use a pound or two of tartaric acid. (2) Your herb beer extract would have to be boiled before the salicylic acid is added to it. If that is done, and the extract filled into perfectly clean bottles, it should keep.

89/68. *F. Carter*.—If you find cubebs too dear, you had better fall back on copaiba.

92/54. *General*.—A candidate who fails in the Minor examination in October cannot again enter until January (Edinburgh) or February (London). A full interval of three months, dating from October 1, is insisted upon.

Pharmacy Schools and the Medical Profession.—Dr. Attfield informs us that the courses of instruction in chemistry, including chemical physics, practical chemistry, materia medica, and pharmacy, delivered in the Pharmaceutical Society's School, are recognised by the medical qualifying bodies.

90/4. *X. Y. Z.* and 89/48. *Butter Powder*.—The object of using bicarbonate of soda as Butter Powder is, no doubt, to neutralise lactic acid, which is formed as the milk undergoes decomposition. Boric acid would be much more effective by preventing fermentation. It may be used in the proportion of half a teaspoonful to the gallon of milk, and may be coloured, if desired, with annatto or red bole.

89/23. *R. B. H.*—A liberal application of tobacco water would no doubt kill the centipedes which infest the snow-drop bulbs, but it might also prove injurious to the bulbs. A mixture of strong infusion of quassia with paraffin oil and soft soap would be equally efficacious. A gallon of the infusion, a pint of the oil, and $\frac{1}{2}$ lb. of soft soap are suitable proportions.

85/59. *Scarlet Tunic.*—Salt of sorrel is the article which soldiers use for removing stains from their scarlet coats. It is used in the ordinary way.

84/26. *Bos.*—The plant which you send (*Centaurea nigra*) is a species of a very numerous composite genus which received its name owing to the centaur Chiron having cured with one of them the wound made in his foot by the arrow of Hercules. Modern surgery has not, however, discovered any marked antiseptic properties in any species of the genus, and we are not aware that *C. nigra* is used medicinally. The leaves of the allied plant, *C. benedicta*, are reputed to possess tonic and diaphoretic properties, large doses producing emesis. (2) For a cheap mucilage you cannot do better than use an East Indian gum with 5 grains of carbonate of potash to each oz. There are other gums in the market—such as the Australian—which are also useful for mucilage-making. Dextrin by itself is not satisfactory.

89/11. *C. Douglas.*—The plant is *Euphorbia cyparissias*.

84/42. *Edar.*—You will find a formula for Liquor Pepsin. Co. c. Bismutho in vol. 31, p. 688. Mr. Baily gives the following, in his "Physician's Pharmacopœia," for Mist. Bismuth. c. Nuc. Vom.:—

	Oz.
Ammonio-citrate of bismuth	1
Spirit of chloroform	4
Solution of ammonia	1
Tincture of nux vomica	3
Dilute hydrocyanic acid, B.P.	1
Tinctura rubra	2
Distilled water, to	16

Mix.

Dose: 15 to 30 minims.

Tinctura Rubra is made by rubbing 2 drachms of carmine with 10 drachms of solution of potash, adding to this 2 drops of otto of rose dissolved in $\frac{1}{2}$ an oz. of rectified spirit and sufficient water to make 10 fl. oz. Filter.

89/49. *T. Padwick.*—In the preservation of fruit with saccharin glucose is used as a basis instead of sugar, and sufficient saccharin added to sweeten. The method of manufacture does not materially differ from the ordinary way. Soluble saccharin should be used.

90/8. *Golden Elixir.*—Custard Powder may be made from Oswego corn-flour. Colour it with turmeric and flavour with almonds or any other flavouring essence.

90/23. *J. J.*—Continuous plaster-spreading apparatus you can get made locally. See the figure and description in the "Art of Pharmacy." From this you will see that the apparatus is very simple.

90/51. *T. J. S.*—The result of the competition for designs for medicine-chests was published in our issue for August 7, 1886. You will get hints in that paper as to the generally useful articles, and for the Transvaal you should give your customer a good stock of quinine, lead and opium pills (for dysentery), Dover's powder, chlorodyne, podophyllin pills (with pil. coloc. c. hyos.), and some antiseptic dressings in compact form. The powdered drugs should be given in the form of tablets, so that division of doses may give no trouble.

88/72. *Quin. Sulph.*—A very satisfactory pill varnish can be made from tolu syrup residues 1 part and ether 3 parts.

92/67. *Carrington.*—We have not published an analysis of Benger's liquor pepticus.

92/56. *Timon*—(1) Chlorodyne. The following is one of many formulæ which we have given from time to time:—

Chloroform	4 drachms
Ol. menth. pip.	8 drops
Capsicin	$\frac{1}{2}$ grain
Ext. cannab. ind.	16 grains
Morph. hydrochlor.	16 "
Acid hydrocyanic (Scheele)	93 drops
Ether	1 $\frac{1}{2}$ drachm
Glycerine	2 "
Syrup	2 "
Treacle	4 "
Water	1 "
Hydrochloric acid	15 minims

Dissolve the morphia in the water and hydrochloric acid by the aid of a gentle heat; then add the solution to the glycerine, syrup, and treacle mixed together. Mix the first four ingredients, and shake until dissolved; then add the solution, in four portions, to the syrupy mixture. Shake vigorously between each portion. Add the ether; then the hydrocyanic acid; and, finally, sufficient glycerine to make the whole measure 2 oz.

(2) Strictly speaking, all preparations sold under the name of "Chlorodyne," by whomsoever made, are liable to stamp duty, because chlorodyne is publicly advertised for the cure of disease. (3) You will find a formula for vermin-killer on page 635.

90/58. *Juvenis.*—Extractum Scutellariæ Fluidum, U.S.P.—Take 50 oz. of skullcap in No. 40 powder, and moisten with 16 oz. of a mixture of 3 parts of rectified spirit and 4 parts of water, pack in a percolator, and add more of the menstruum; when the percolate begins to drop, close the orifice. Macerate forty-eight hours, then allow percolation to proceed. Collect and set aside the first 38 oz. Continue percolation until the drug is exhausted, evaporate the percolate to the condition of a soft extract, which dissolve in the reserved portion, and add sufficient of the menstruum to make 50 fluid oz.

95/41. *Pyrophosph.*—The quantity of pyrophosphate of iron given in the formula, page 62, January 14, is a misprint for 3ss.

93/17. *B. C. H.*—H. and T. Kirby & Co. (Limited), the makers of sal mineralis, inform us that they do not make a solution of the preparation.

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

81/57. What is "sudorate of potass?"

85/70. What is usually sent out for Stanley's lotion for the skin?

86/10. Composition spice powder, used in sprinkling hayricks while building.

84/1. "Megaloscope." What is it? The inquirer has found one amongst old stock. It is evidently for viewing photos.

89/33. Formula for Lady Ford's liniment. It appears to be well known at Dover.

93/54. Who are the makers of the best machines for grinding cream of tartar crystals to fine powder?

85/56. Address of maker or makers of tins similar to Guest's brass paste tins.

29/79. What is the best covering for the bottom of one's shop windows, to combine style, cheapness, and permanence?

92/18. Where can gum amber be obtained?

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The safest and best preparation of Opium; produces neither headache, sickness, nor constipation.

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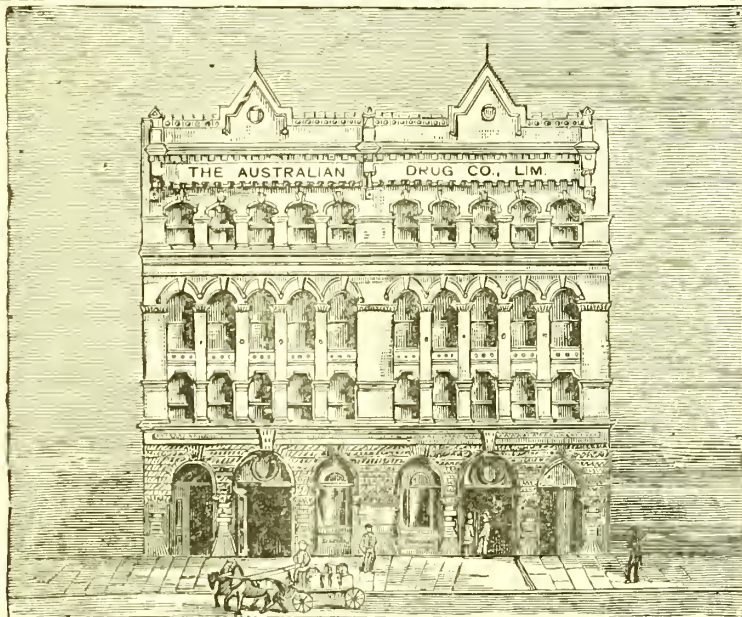
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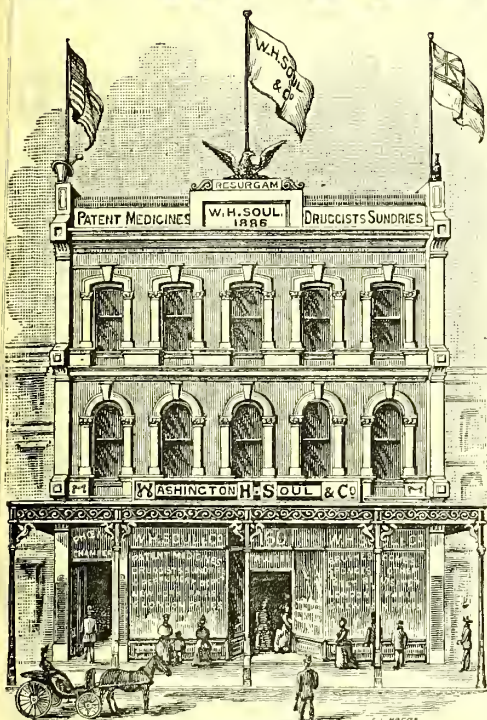
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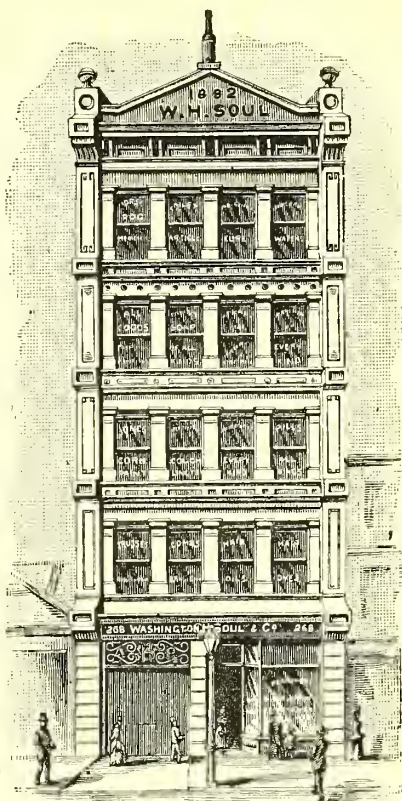
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Cascara Sagrada (Ext.) , 2 gr.	2/-	Ferri Quininæ et Strychninæ Phosph. (Wyleys'), representing Easton's Syrup ...	3/-	Phosphorus , $\frac{1}{80}$ Ext. Nuc. Vom., $\frac{1}{4}$ gr. ...	2/-
Ergotin. Comp. B. Ergotin, 1 gr.; Ferri Sulph. Exsic., 1 gr.; Ext. Hellebor., 1 gr.; Ol. Sabinæ $\frac{1}{2}$ m.; Ext. Aloes Soc., 1 gr....	3/-			Podophyllin Resin , $\frac{1}{8}$ gr.; Pil. Rhei Co., 4 gr. ...	2/6
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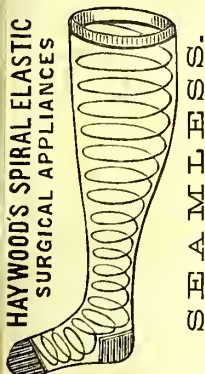


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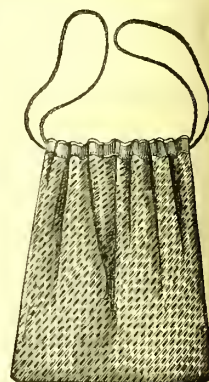
	Gloves. (Pairs.)	Straps.	Pads.		Gloves. (Pairs.)	Straps.	Pads.
CALEFACIO OR BADEN, No. 1, soft Brown per doz. 5/4 & 6/0	9/0	5/4		HONEYCOMB, White. per doz.	5/4	9/0	5/4
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CALEFACIO OR BADEN, as- sorted patterns, export quality, per doz. 4/0	(Red labels)			REVERSIBLE, No. 3, one side Egyptian Loofah, the other best White Turkish, per doz., single	4/0	13/0	—
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Ditto Best Quality " 4/9 & 6/-				" " 5/-			

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WITH BALL CLASP FASTENINGS, NICKEL-PLATED.

	No. 2	3	4	5	6
	8×7	9×8	10×9	11×10	12×11 inches.
CHECK... ..	16/0	18/0	20/0	26/0	28/0 per dozen.
PAISLEY	18/0	20/0	22/0	28/0	32/0 "

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It must have been observed that for some time the public have become disgusted with the old poisonous fly paper, and have taken somewhat readily to a sticky sort of substitute.

The advertiser has perfected and patented a Fly Paper of this nature, which will certainly be the leading thing in this way in the future. It is a well got-up and effective paper, and is as cleanly to handle as a sheet of note-paper.

In the advertiser's own retail establishment last season the sale of this was simply enormous, as they were freely used by tradespeople (butchers, bakers, grocers, and confectioners), who would not dare to risk the danger from dead poisoned flies about their stock. Owners of horses and cowkeepers were delighted with them as they spared the animals the torture from this source.

From the nature of the article it cannot very well be stocked by Wholesale Houses for distribution to the Retail Trade, but the Parcel Post will carry them direct from the maker, and Postal Orders will facilitate remittance.

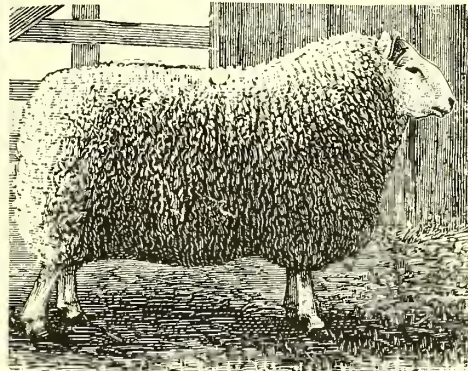
The price is 4 6 per gross (carriage free), but where a large trade is developed more liberal terms will be given.

Send sample order for small lot, and while the season is on you are bound to do a big thing.

ADDRESS—

S. WILSON, CHEMIST, ST. HELENS, LANCs.

QUIBELLS' SHEEP DIPS



AGENTS
WANTED.

(1) Write
for Terms to

QUIBELL
BROS.

Newark-on-
Trent.

*Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by
the principal Stockbreeders everywhere for nearly 60 years.*



DAY, SON & HEWITT'S HORSE, CATTLE, AND SHEEP MEDICINES.



THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings and relaxed tendons in Horses. For pain after calving and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

THE RED DRENCH.

Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellows, surfeit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 3s. 6d.; for Cattle, 13s. per dozen Box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

20s. per dozen Box.

THE GASEODYNE.

Used as laudanum in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

3s. 6d. per Bottle; 1-dozen Box, 10s. 6d.

THE RED PASTE BALLS and RED POWDERS.

For ill-conditioned Horses and Colts; invaluable after hard hunting or driving. For coughs, colds, starting coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone.

7s. 6d. per dozen; 3-dozen Box, 21s.

THE BLACK PHYSIC BALLS.

These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

Price, 8s. per dozen; Box containing 3 dozen, 23s.

THE BRONCHOLINE.

The great and reliable remedy for Husk or Hoarse in Cattle, Heifers, Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

THE "KEY TO FARRIERY."

A small work published by us on the general ailments of stock, their treatment and cure.

Large Edition, in Cloth, 2s. 6d.; Small Edition, 1s.

	Price
The Stockbreeder's Medicine Chest. No. 1 contains a complete assortment of all our preparations for treating diseases of stock generally, £6 6 0	
The Stockbreeder's Medicine Chest. No. 2 is suitable for ordinary Farm use, and contains a useful selection of the above Medicines ..	2 16 6
The Horsekeeper's Medicine Chest. No. 3 is arranged for large Horse Owners, Colleries, &c., and contains 12 specially selected Medicines	5 5 0
The Horsekeeper's Medicine Chest. No. 4 contains a smaller assortment, but has everything requisite for all ordinary ailments in Horses	2 17 6

Prepared only by **DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.**

LIBERAL DISCOUNT TO FOREIGN BUYERS.

PARTICULARS AND LIST OF AGENTS ON APPLICATION.

PAPIER-MOURE.

Per 100, **2/.** Per 1,000, **19/.**

INSECTICIDE VICAT.

In Bottles - - per doz. **3/4 & 6/9**
 In Bellows Boxes - - per doz. **3/4**
 In ditto (Tin) ,, **6/9**

S. MAW, SON & THOMPSON,
ALDERSGATE STREET, LONDON.

ESTABLISHED
 NEARLY
50
 YEARS

DAY & SONS'

WORLD-FAMED HORSE AND CATTLE MEDICINES.

THE LARGEST SALE IN THE WORLD.

28
 PRIZE
 MEDALS.



FOR Colic or Gripes in Horses and Cattle.
 FOR Debility and Chills in all Stock.
 FOR Scour in Calves and Lambs.
 FOR Hoven or Blown Cattle and Sheep.
 FOR Shivering Fits in Horses.
 FOR Weakness after Lambing or Calving.

PRICE—**10/** PER HALF-DOZEN, OR **19/** PER DOZEN.



FOR Healing all Wounds in all Animals.
 FOR Kicks, Stake Wounds, Broken Knees in Horses.
 FOR Cracked Heels and Saddle Galls in Horses.
 FOR Sore Teats and Swollen Udders in Cows and Ewes.
 FOR Dressing and Anointing in Lambing and Calving.
 FOR Every Horse-keeper, Farmer, and Shepherd.

PRICE—**2/6** PER BOTTLE.



FOR Fevers, Yellows, Indigestion,
 FOR Red Water, Costiveness, and Dulness.
 FOR Disordered System in Cattle.
 FOR Bad Cleansing after Calving.
 FOR Preventing Milk Fever and Inflammation.
 FOR Purifying and Increasing the Milk.

PRICE—**12/** PER DOZEN PACKETS.



FOR Ill Condition, Off Appetite, Disordered System.
 FOR Heat-lumps, Itching, and Scurvy Skin.
 FOR Headbound Bad Water, and Blood Ailments.
 FOR Coughs, Colds, Sore Throats, and Fevers in Horses.

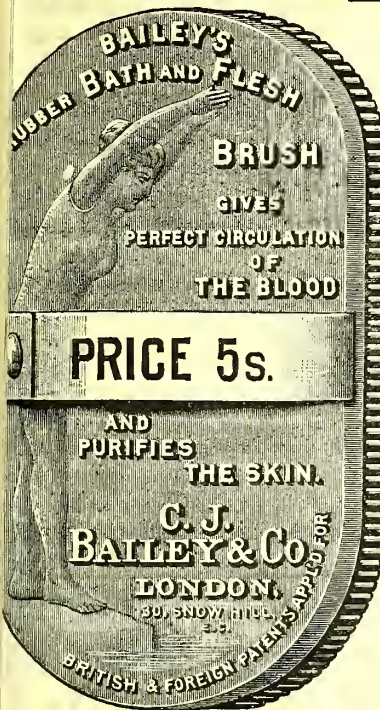
IN CANISTERS. PRICE—**3/6, 7/, 14/, AND 21/.**

THE "ORIGINAL" UNIVERSAL MEDICINE CHESTS, **£2 4s. and £5.** FOR ALL DISORDERS OF HORSES, CATTLE, CALVES, SHEEP, AND LAMBS.

Only Prepared by the Inventors, **DAY & SONS, CREWE, CHESHIRE.**

May be obtained of Burgoyne, Burlibidges & Co.; Sanger & Sons; Evans, Lescher & Webb; Barclay & Sons, &c., London; Evans, Sons & Co., Liverpool, &c. Exporters are invited to apply for terms; Liberal Discount offered.

BAILEY'S RUBBER FLESH BRUSH.



We have received for trial and notice from Messrs. Bailey & Co., 30 Snow Hill, London, E.C., specimens of their bath and flesh brushes. These are entirely formed of vulcanised india-rubber. The back is about one third of an inch in thickness, and is sufficiently flexible to adapt itself to the curved surfaces of the body and limbs. In the place of the bristles of the ordinary brush is a series of small india-rubber rods, nearly two thousand in number. These have a very efficacious action in removing dirt from the surface of the skin of the body. The action of the brush used with soap and water more nearly resembles shampooing than ordinary rubbing. It is admirably adapted for use after exercise, being more detergent than a sponge or towel, and producing a very pleasant effect after fatigue. For athletes, it is certainly one of the best flesh brushes we have seen, as it leaves the skin in a condition most favourable to its healthy action.—*Field*, April 14, 1888.

BAILEY'S RUBBER BATH BRUSH.

Valuable as the use of the flesh brush is when employed in the bath in removing the outer or dead portions of the cuticle, and so promoting the healthy action of the skin, its use is not unfrequently objected to, on account of the redness it produces, owing to the bristles irritating the skin. Messrs. Bailey & Co. have forwarded to us a bath brush formed, so to speak, of bristles or slender rods of india-rubber, many hundreds in number. These are set in a flexible back, which adapts itself to the curves of the body. When used in the bath with any ordinary soap its action in rubbing away the effete portions of the skin, and leaving a beautifully smooth surface, is most satisfactory, and it produces a sensation of comfort that must be felt to be fully appreciated. The most skilled shampooer could not obtain a more marked effect. The gentle rubbing friction of the brush not only promotes the circulation of the blood, but by causing a due action of the skin, relieves the congestion of the muscles or internal organs, and produces a feeling of relief after fatigue that is most satisfactory. We can recommend this new bath brush very strongly. Smaller brushes are also made as toilet brushes, which are most efficacious in cleaning and whitening the hands. These brushes may be obtained of any druggist or dealer in toilet articles, the wholesale depot being 39 Snow Hill, E.C.—*Queen*, April 14, 1888.

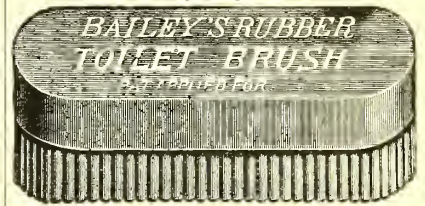
Price TWO GUINEAS per dozen.

Send us postal order and we will forward by return post.

For Sale by all Chemists.

CLEAN HANDS

For everyone, no matter what the occupation, by using



It removes Ink, Tar, Grease, Paint, Iron Stains, and in fact everything foreign to the colour of the skin, simply by using with soap and water. It never becomes foul or carries any contagion, and will not injure the most delicate skin, as is done by the use of Pumice Stone, Bristle Brushes, &c. **Printers, Penmen, Typewriters, Blacksmiths, Machinists, Shoemakers, Painters, Farmers,** and all whose hands are stained by their labour can cleanse them easily without rupturing or weakening the skin.

Price One Shilling; large size, **Two Shillings.** Send us postal order and we will forward by return post. For sale by all Chemists.

Small size, 8s., and Larger size, 17s. per dozen.

C. J. BAILEY & CO.,

30 SNOW HILL, LONDON.

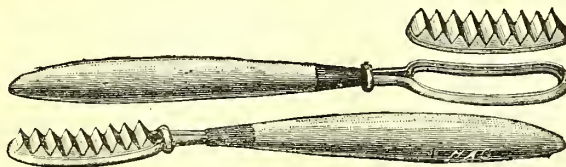
C. J. BAILEY & CO., Manufacturers, 30 Snow Hill, LONDON, E.C.

H. A. GOODALL & CO., ESTABLISHED 1852.

Bartlett's Buildings, LONDON, E.C.

WHOLESALE ONLY. NO PRIVATE BUYERS SERVED.

THE "IDEAL" FELT TOOTH BRUSH.



A GREAT NOVELTY IN TOOTH BRUSHES.

Prevents decay, soothes the gums, and polishes the teeth, which no other Brush can excel.

HANDLES.

Assorted Bone and Horn, with Nickel-plated Imperishables, 11/- per dozen.

BOXES OF FELT,

Containing 18 Heads, 7/- per dozen.

An Attractive Show Card given with each Dozen.

MEDICINAL GELATINE CAPSULES

			Containing	30	36	48
Cascara Sagrada (5 mins.), in round boxes	Per dozen	7/-	In oval screw-cap bottles	—	—	—
Castor Oil, in square boxes	...	5/-	Ditto ditto	5/6	—	8/-
Cod Liver Oil, in square boxes	...	7/-	Ditto ditto	—	8/-	—
Copaiba, without Name, in oval boxes	...	4/9	Ditto ditto	5/6	—	8/-
Copaiba, with or without Name, best, in oval boxes	...	5/9	Ditto ditto	6/6	—	9/-
Copaiba, Flexible, in oval boxes	...	6/-	Ditto ditto	6/9	—	9/6
Copaiba, Flexible, larger, in oval boxes	...	8/-	Ditto ditto	—	10/-	—
Copaiba and Cubeb, in square boxes	...	9/-	Ditto ditto	—	11/-	—
Copaiba, Cubeb, and Buchu, in oval boxes	...	8/-	Ditto ditto	—	10/-	—
Copaiba, Cubeb, and Sandal-wood Oil, Flexible, in oval boxes...	...	17/-	Ditto ditto	17/-	—	25/-
Oil of Male Fern (18 drops), in square boxes	...	17/-	Ditto ditto	—	18/-	—
Sandal-wood Oil, Flexible, English, in round boxes	...	26/-	Ditto ditto	—	30/-	—
Sandal-wood Oil, Flexible, Foreign, in round boxes	...	20/-	Ditto ditto	—	23/-	—
Tar, Norwegian, in square boxes...	...	6/-	Ditto ditto	—	7/-	—
Terebene, pure (10 drops), in round boxes	...	12/-	Ditto ditto	13/-	—	20/-
Turpentine, in square boxes	...	6/-	Ditto ditto	—	7/-	—

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

S. MAW, SON & THOMPSON, LONDON.

MAW'S MENTHOL CONES

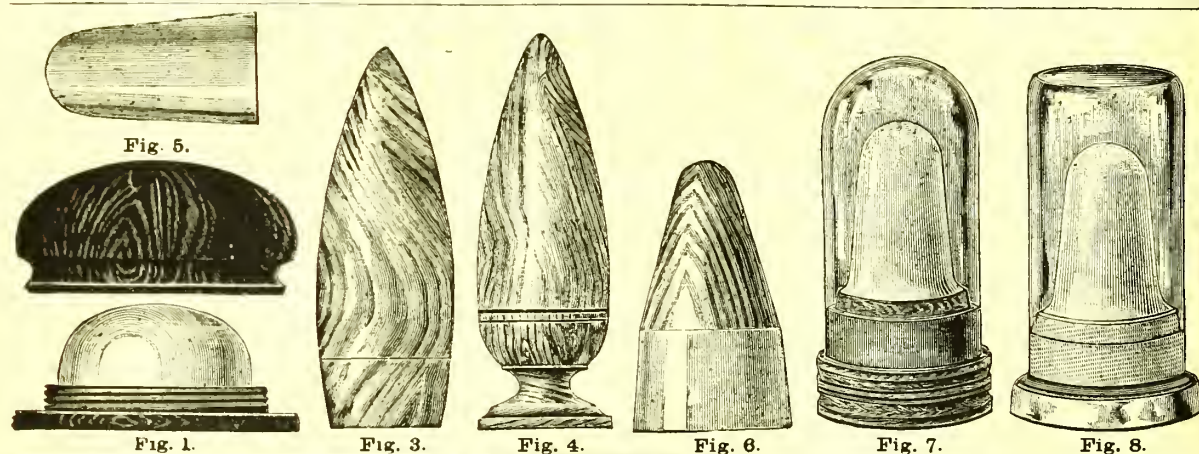


Fig. 1.	In Ebony Cases, flat for the pocket	...	...	...	...	Per doz.	6/-
Fig. 3 & 4.	In Boxwood Cases, per doz., 3/- and 4/-; in Vegetable Ivory	...	...	...	...	"	6/-
Fig. 5.	In White Opaque Glass Jars with Red Celluloid Caps	...	...	...	...	"	4/- and 6/-
	Mounted, in Stoppered Bottles	...	...	...	...	"	2/6 and 3/6
Fig. 6.	Mounted on Vegetable Ivory, in Glass Bottles, Screw Metal Caps	...	...	...	...	"	6/6
Fig. 7.	On Boxwood Mounts, Glass Covers	...	...	...	...	"	4/6
	On new Glass Mounts, Glass Covers	...	...	...	...	Per doz.	3 6, 4/-, 5/6, and 8/-
Fig. 8.	On Glass Mounts with Glass Covers	...	...	...	...	Per doz.	4/6 and 6/-

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

S. MAW, SON & THOMPSON, LONDON.

DISPENSING BOTTLES & PHIALS*The following are our greatly Reduced Prices:—***CLEAR BLUE TINTED.**

and 4 oz.	8/6 per gross.	12 oz.	11/6 per gross.
and 8 oz.	7/6 " "	16 oz.	15/6 " "

WHITE MOULDED PHIALS.

LONG OR SQUAT SERIES.

oz.	3/0 per gross.	1 1/2 oz.	4/3 per gross.
oz.	3/6 " "	2 oz.	4/0 " "

Prompt attention to country orders. Packages 1/ each, allowed for if returned. Sample bottle sent free on application.

L. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS,

25 Francis St., Tottenham Court Road, London, W.C.

established upwards of 70 years.

Bankers, London and Westminster

CORK SOCKS.

These articles are strongly recommended as

**A Preventive against Colds,
Rheumatism, &c.***Can be obtained through all Chemists' Sundriesmen, &c.*

MANUFACTURERS (WHOLESALE ONLY)—

BISHOP & WARDEN,

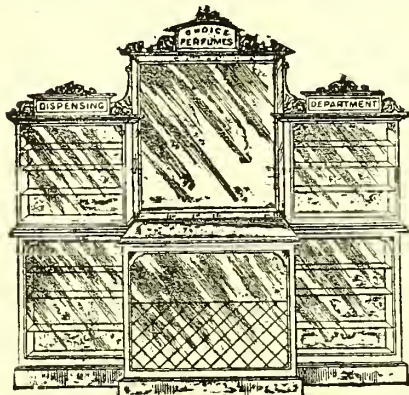
161 GT. CHARLES ST., BIRMINGHAM.

Price Lists Free on application.

"THE CHEMIST" DISPENSING COUNTER.

8 feet long by 2 feet wide .. £24
If the Dispensing Screen only, £12

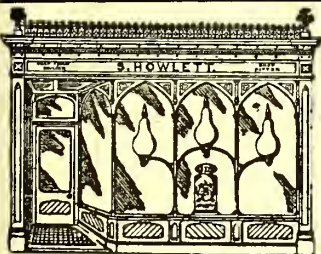
This handsome Dispensing Counter is manufactured in Spanish mahogany, and of the best workmanship, so that it will stand any climate. The counter has a solid mahogany top, and plate-glass case front. The centre part fitted to take sponge. A mahogany screen on top, consisting of two plate-glass cases, with shelves inside, and large plate-glass mirror in the centre, and three glass tablets with gold writing in ornamental mahogany carved work. The back of screen fitted with small shelves and a glass poison cupboard. The inside of counter fitted with strong counter drawers, shel and cork drawer, open shelves, &c.

**NOTICE TO THE TRADE.**

In consequence of inferior Second-hand Goods being sold for our make, we have found it necessary to protect our reputation for best work with a Trade Mark, as above, and unless goods are so stamped we cannot be answerable.

BOWLING & GOVIER

Manufacturers of High-class Shop Fittings,
GUN ST., BRUSHFIELD ST.
BISHOPSGATE, E.C.

E. NATALI,**SHOW CASE MAKER,****SHOP AND OFFICE FITTER,****207 OLD STREET, near Pitfield Street, LONDON, E.C.****Works—HENSON STREET.****SECOND-HAND COUNTERS, FITTINGS, GLASS CASES, &c., always in Stock.**

ESTABLISHED 1830.

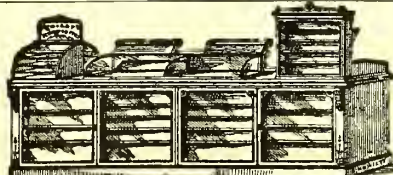
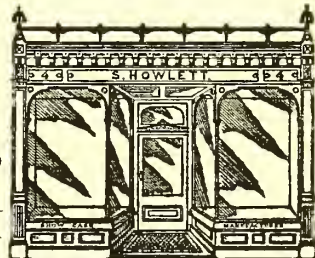
S. HOWLETT.

MEDICAL AND

GENERAL SHOP FITTER,

Shop-Front Builder and Show-Case Maker.

EXPORT ORDERS CAREFULLY PACKED AND SHIPPED.



SHOPS FITTED by Contract, in Town or Country, with every requisite, on the most improved principles, and at lowest prices.

NUMEROUS REFERENCES may be obtained of Leading Chemists in all parts of the Kingdom.

A LARGE STOCK of New and Second-hand Fittings and Cases to be sold very CHEAP.

CABINET FITTER to the Pharmaceutical Society of Great Britain.

PLANS and ESTIMATES SUPPLIED.

Manufactory and Showrooms—4 Lindley St., Sidney St., Mile End Road, LONDON, E.

KILNER'S BOTTLES

Address, BOTTLES LONDON.
Telegraphic Address, BOTTLES LONDON.

United Telephone No. 7509.

Having all the Latest Improvements for the Production of Bottles, Cases, &c., can offer all Kinds, Shapes, Sizes, and Prices to

BUYERS.

That our BOTTLES are the BEST VALUE is SELF-EVIDENT from the FACT that they are

BUYERS.

MOST FAVOURABLY KNOWN IN ALL THE PRINCIPAL MARKETS of the WORLD.

BOTTLING AND CORKING MACHINES.

FEEDING BOTTLES.

DISPENSING, FEEDING, PICKLE, DRUG, OIL, SAUCE, VINEGAR BOTTLES.

SYPHONS.

In Azure Blue, Green, or Amber Glass,
In White or Blue Glass.

SYPHONS.

Round or Oval, Long or Short Levers,
Bright Metal or Silver-plated Tops.

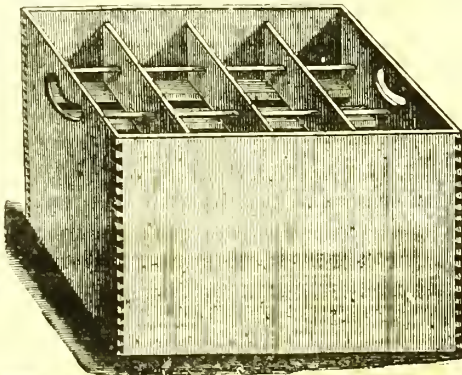
Catalogues and Price Lists sent free on application.

Catalogues and Price Lists sent free on application.

Correspondence cordially invited. Quotations & Samples sent by return.

CORKS & STOPPERS
IN
ENDLESS VARIETY.

**OUR LEDGE
MOUTH BOTTLES
ARE THE BEST.**



**VAN BOX CASES,
TRAYS, ETC.**

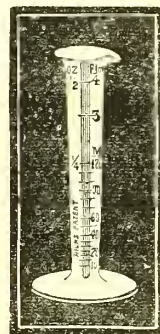
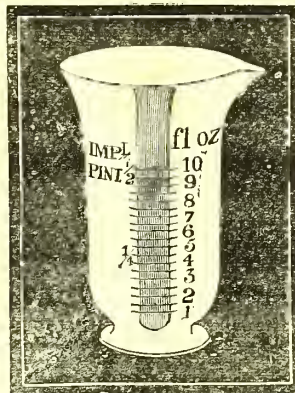
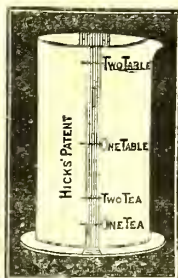
**OUR CODD'S
BOTTLES
ARE THE BEST.**

➡ No. 3^A GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON. ➡



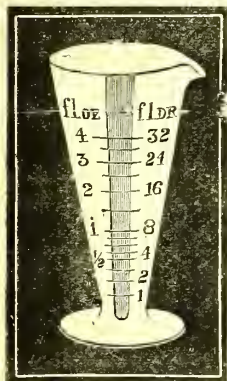
AWARDED
GOLD MEDAL.

ENORMOUS SUCCESS!



I. I. EXHIBITION,
LONDON, 1885.

WONDERFUL SALE
ALL OVER
THE WORLD.



NEW PATENT

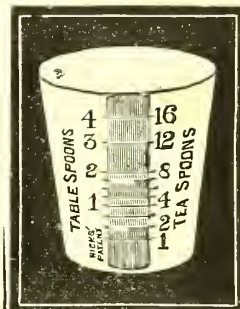
OPAQUE GLASS MEASURES

For Domestic, Chemists', and Photographers' Use.

The advantage of these Measures over those of Plain Glass consists in their being made of Pure White Enamel Tubing, with the divisions and figures fired on in indelible black. They can therefore be read with the greatest ease in any light.

SOLE MANUFACTURER:—

J. J. HICKS, 8, 9, and 10 **LONDON.**
HATTON GARDEN,



To be obtained of all Wholesale Houses and Chemists. Price Lists on application.

DR. JOHN FRANCIS CHURCHILL'S INHALANT



REGISTERED.

"SPIRONE"

TRADE MARK.

FOR THE TREATMENT AND CURE OF ALL

DISEASES OF THE LUNGS, WINDPIPE, NOSE, AND THROAT,

Claims to be a Specific for all Congestive and Inflammatory conditions of the Respiratory Apparatus, and will be found efficacious in

COUGHS AND COLDS, ASTHMA, BRONCHITIS,

Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough, Croup, Diphtheria, Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice, Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

PREPARED ONLY BY THE INVENTOR.

None Genuine except such as bears the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the Bottle on the Label over the Cork, and on the Wrapper,

JOHN FRANCIS CHURCHILL, M.D. (Paris),

The Discoverer of the Specific Cure for Consumption, and of the Medicinal Properties of the Hypophosphites.

Price 4s. 6d. and 11s. per Bottle.

SET OF APPARATUS FOR ADMINISTRATION, 15/. PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

THE SPIRONE COMPANY, Lim., Depot—17A Duke St., Manchester Square, LONDON, W.

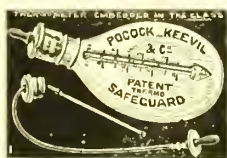
J. BEEDZLER & CO.
LONDON

ANNETT'S COUGH BALSAM

J. BEEDZLER & CO.
LONDON

IN BOTTLES, 13½d. AND 2s. 9d.

THE PATENT THERMO SAFEGUARD FEEDING BOTTLES.



A THERMOMETER Embedded in the Glass.
REDUCTION IN RETAIL PRICES 10
1/-, 1/6, and 2/6 each.
Wholesale of London Houses and
POCOCK, KEEVIL & CO
72 Wandsworth Road, S.W.

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS

FOR CLEANING PLATE

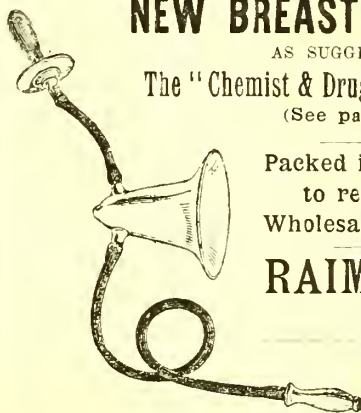
BRADLEY & BOURDAS'S
ALBATUM or WHITE ROUGE,
For Cleaning Gold, Silver, and Plated Goods.

Since its introduction as a substitute for the ordinary Rouge, a quarter of a century ago, the sale has amazingly increased both at home and abroad. A trial is only needed to prove its superiority over other plate powders in use. Sold in Boxes at 1s. and 2s.; Tins, 6s. 6 Pont Street, Belgrave Square, and 48 Belgrave Road, London, S.W.

NEW BREAST EXHAUSTER,

AS SUGGESTED IN

The "Chemist & Druggist" on June 16th
(See page 781).



Packed in Cardboard Boxes
to retail at 1s. each.
Wholesale, 7s. per doz. net.

RAIMES & CO.
YORK.

RAIMES, CLARK & CO.
EDINBURGH.

CONSTIPATION.

DAHL'S DYSPEPSIA CAKES.

PANIS DIETETICUS.

NATURAL REMEDY FOR INDIGESTION AND CONSTIPATION.

Recommended by several leading Medical Men. 2 6. 1/ boxes.

No more Castor Oil! Special Brand for Children! The
Children's Bread! Price 2/- per box.

For Terms apply to Wholesale Houses.

DAHL'S AGENCY:—41 EASTCHEAP, LONDON

BUYERS' GUIDE, SEE PAGES 25—27.

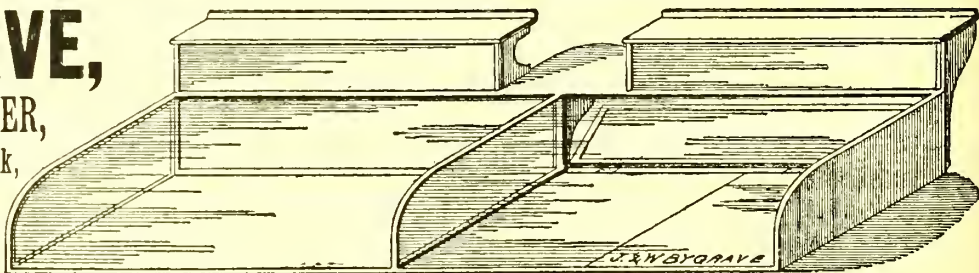
BYGRAVE,

SHOP FITTER,

111 Shepherdess Walk,

CITY ROAD,

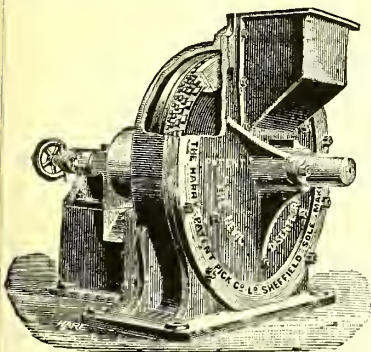
LONDON, N.



Bent-top plate-glass Counter Showcase, in French polished mahogany, or ebonized, with two upright mirror plate-glass fronted shelves, and table in centre for serving over, and mahogany falls at back lined with mirror plate glass, inside fitted with crimson velvet trays— if 5 ft. long, 18 in. wide, 8 in. high (total height 13 in.), £5 10s.; 5 per cent. off for cash.

HAVE YOU SEEN THE "DEVIL" DISINTEGRATOR & MIXER?

This Machine will Grind to Powder, Granulate, or Shred any Material, Animal, Vegetable, or Mineral.



The following table gives some information as to the quantities of various classes of material the Machines will deal with per hour:—

MATERIAL	No. 1 Size Machine	No. 2 Size Machine	No. 3 Size Machine
Coal, Fine	10 cwt.	20 cwt.	50 cwt.
" (for Briquettes)	20 "	40 "	200 "
Lead Ore	30 "	60 "	140 "
Slate	20 "	25 "	50 "
Bones (Dry), Fine ..	3 "	20 "	50 "
" " Medium	5 "	35 "	90 "
" " Coarse	7 "	40 "	110 "
" (Green)	3 "	6 "	15 "
Hoofs and Horns ..	2½ "	8 "	20 "
Rags	—	2 "	5 "
Indian Corn	5 "	15 "	40 "
Wet Clay	—	20 "	50 "
Oak Bark	—	15 "	30 "

Purchasers should compare the quantities of material ground per hour with the capacity of other Machines. There is no other Grinder that will deal with anything like these quantities in the same time

**CLOGGING
ABSOLUTELY
IMPOSSIBLE.**

No.	PRICE	Belt required	Diameter of Pulley	Revolutions per Minute
1	£30	3 inches	8 inches	1,000
2	£60	5 "	12 "	900
3	£90	7 "	14 "	800

The chief feature of this Grinding Machine is that it combines the centrifugal with the grinding action, and it can be adjusted to grind to any degree of uniform fineness while in motion. No Screens or Grates are required. Will Grind Wet or Dry Material, Clogging being impossible.

Samples of material forwarded to us may be passed through the Machine in the presence of intending purchasers or forwarded by rail. Larger sizes made to order.

SOLE
MAKERS

THE HARDY PATENT PICK CO., LD., Engineers and Mining Tool Makers, **SHEFFIELD**

THE SELF-OPENING TIN BOX COMPANY

(GRIFFIN'S PATENT).

ALBION TIN WORKS, YORK ROAD, KING'S CROSS, LONDON, N.

Telegraph Address—"TIN BOX LONDON."



Boxes ready made up, or the Patent Tops only (ready for making up), are supplied.

THE NEW TIN BOXES for all kinds of Hermetically Sealed Preserved Foods, DRUGS and CHEMICALS.

THE NEW TIN BOXES are as cheap as the ordinary Boxes, require no soldering up, and can be opened with a penny piece.

THE NEW TIN BOXES are being adopted by the largest Food-preserving Houses and CHEMISTS, to whom references can be given.

THE NEW TIN BOXES are also perfect for Tea and Coffee Canisters, Biscuit Boxes, Confectionery, Paints, Oils, Varnishes, Soaps, &c.

THE NEW TIN BOXES are described by the Times, Standard, Chronicle, Illustrated News, Engineer, Grocer, Oil and Colourman, and Press generally, as the "neatest and most elegant invention ever made."

CAUTION.

IN THE HIGH COURT OF JUSTICE, CHANCERY DIVISION.

GRIFFIN v. NOAKES. 1887. G. No. 1,088.

GRIFFIN v. FRAVER. 1887. G. No. 1087.

As we understand from some of our Clients that, from false representations made, an impression prevails that the proceedings in these actions have failed, we beg to inform the public that such is not the fact, and that the proceedings are being carried on as fast as possible, in the Chancery Division of the Court, to restrain the Defendants from selling or making Tins similar to those manufactured by us, and from infringing our Patents. The Defendants, pending the proceedings, have been ordered by the Court to keep an account of all sales made by them. Our Solicitors, Messrs. CLARKSON, GREENWELL & Co., have had instructions from us to proceed against all persons so offending.

FOR THE SELF-OPENING TIN BOX COMPANY, G. FEATHERSTONE GRIFFIN, Manager.

EGYPTIAN LOOFAHS

OF

VERY SUPERIOR QUALITY.

Assorted Sizes, from 12 to 15 in. inclusive,
2/6 per dozen.

Assorted Sizes, from 16 to 18 in. inclusive,
4/- per dozen.

**S. MAW, SON & THOMPSON,
 LONDON.**

J. SANGER & SONS' PRICE CURRENT AND ADDENDA

With over 300 Illustrations, will be found a most Comprehensive List of

PROPRIETARY MEDICINES, DRUGGISTS' SUNDRIES,

PERFUMERY, LOZENGES,
 MINERAL WATERS, &c.

AND WILL COMPARE FAVOURABLY WITH
 ANY OTHER LIST AS TO

PRICES CHARGED.

SENT POST FREE ON RECEIPT
 OF BUSINESS CARD.



Purchasers of Druggists' Sundries, Smelling
 Bottles, Hair Brushes, Combs, Sponges, Thermo-
 meters, Filters, and Boxes of all descriptions
 should pay a visit to our Showroom before pur-
 chasing elsewhere, in order to compare our prices
 and quality against other houses.

**AGENCIES OF ALL KINDS UNDERTAKEN
 ON FAVOURABLE TERMS.**

BUYERS OF PERFUMERY

WOULD DO WELL TO WRITE FOR

SAMPLE 5-OZ. BOTTLE OF

ALSO

PIERRE DAVID'S EXTRACTS. PIERRE DAVID'S PERFUMES,

All the leading odours at 10s. per 20-oz. bottle.

In round stoppered bottles, at 13s. and 22s. per doz.

Above Prices are subject to 10 per cent. and 5 per cent. One Month.

A varied assortment of Crystal and other Smelling and Toilet Bottles always in Stock.

Write for Sample Dozen (all different patterns), for 5s. or 7s. 6d., subject to same discount.

Inspect our Stock of **FLESH GLOVES, RUBBERS, LOOFAHS, and SPONGES.**

IN COMPARING PRICES, NOTE THE DISCOUNTS.

JOHN SANGER & SONS, 489 OXFORD ST, LONDON, W.

PURE SPIRITS OF WINE.

60 o.p., 20/3 per gall. ; 56 o.p., 19/9 per gall.

1/ per Gall. Discount for Cash with order.

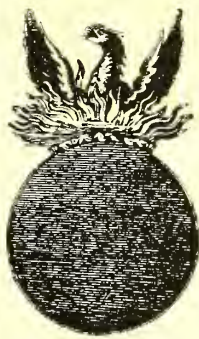
Further allowance for quantity. STEAM STILL ONLY.

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ST. ANDREW'S DISTILLERY, CLERKENWELL RD.

LONDON, E.C.

COLTHURST & HARDING,



BALL DENOTES COLOUR OF PAINT.

BRISTOL—Manufactories: Phoenix Wharf and Temple Gate. Offices: Temple Gate. Telegrams: "Phoenix Bristol."

LONDON—Manufactory: Alpha Works, Millwall, E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

HARD LUSTROUS ENAMEL,
IN ALL THE ART SHADES.

For all kinds of decoration on Wood or Iron. Dry with a surface like Porcelain. Sold in small or large Tins, or in bulk. Prices and shades on application.

WHITE LEAD, ZINC WHITE, PAINTS & COLOURS OF ALL KINDS.

MIXED PAINTS READY FOR USE,
In Tins, 1, 2, 4, 7, and 14 lbs. each.

HIGH-CLASS VARNISHES

Of all kinds, for Coachbuilders, Decorators, &c.
OIL BOILERS, REFINERS & MERCHANTS.
Export Orders receive special and prompt attention.

PURE GRAIN SPIRIT 56 o.p. ... 18/5

Do. Do. DOUBLE DISTILLED 18/9

Cash with Order. Reductions for Larger Quantities than Two Gallons.

S. S. & Co.'s Speciality for Perfumery. Samples free.

STEPHEN SMITH & CO., BOW, LONDON, E.

ROBINSON'S ORANGE WINE.

Specialy prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Cask containing 9, 18, 30, 60, or 120 Gallons. Terms on application.

PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/6 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order.
B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.

FLESH GLOVES.

SOLPORT BROTHERS,

68 SHAFTESBURY ST., NEW NORTH ROAD, LONDON, N.

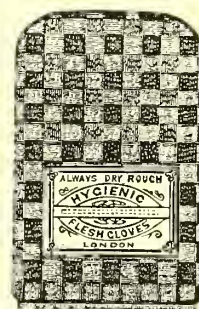
MANUFACTURERS (WHOLESALE ONLY) OF

FLESH GLOVES

CORN & BUNION PLASTERS

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T. BAGE BLYTON & CO.

PHARMACEUTICAL CHEMISTS,

MANUFACTURERS OF

BRITISH PHARMACOPŒIA, THROAT HOSPITAL, and every description of MEDICATED LOZENGES & BOILED SWEETS

For sale by Chemists, for Wholesale and Export; also
COMPRESSED TABLETS, including Ammonium Chlorid, Camphor (with Sugar), Cocain, Cocain with Pot. Chlor. and Borax, "Voice Tablets"; Potassium Bicarbonate, Potassium Chlorate (from chemically pure salts), Potassium Chlorate with Borax, Saccharin, $\frac{1}{4}$ -grain, $\frac{1}{2}$ -grain, and 1-grain.

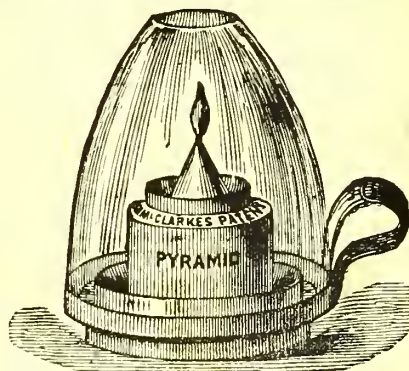
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PRICE LISTS TO ANY ADDRESS UPON RECEIPT OF BUSINESS CARD.

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SAMUEL CLARKE'S PATENT "PYRAMID" NURSERY LAMP FOOD WARMERS.



PATENT
"PYRAMID" NIGHT LAMPS, 6s. per doz., Lacquered or Bronze
AND
"PYRAMID" NIGHT LIGHTS, 7s. 6d. per doz. boxes.
Less 5 per cent. Cash.
8 Lights in each Box, burn 9 hours each.

The "Pyramid" Night Lamps render the burning a Night Light perfectly safe, entirely prevent FLICKERING (so objectionable in all Night Lights not burned in a Lamp), are clean, portable, and render a Night Light useful for many purposes where they otherwise would not be.

The "Pyramid" Food Warmers, by their peculiar construction—the glass chimney conducting and concentrating heat to the bottom of the water vessel—a larger amount of LIGHT and HEAT is obtained than can be in any other lamp of the same class. Without SMOKE or SMELL.

The "Pyramid" Night Lights are made much larger than any other Night Light, and give double the light; they are, therefore, very suitable for nursery lamps, lighting passages, lobbies, &c., and adaptable to many purposes for which the common Night Lights are useless.

DIRECTIONS FOR USING THE PATENT "PYRAMID" FOOD WARMER AND NIGHT LIGHTS.

The food which is required to be kept hot to be placed in the porcelain panakin, and water in the tin vessel—just sufficient to admit of the porcelain panakin being placed therein. Care should be taken in lighting the Night Lights not to injure the top, which is a protection for the wick, but simply apply a lighted match or taper, and allow the material to melt away.

	RETAIL.	WHOLESALE.	REDUCED PRICES—NET CASH.	
No. 1 Holds Half-pint Food, bestes Water, price	3s. 6d. each	.. .. 30s. per dozen	.. .. 27/- per dozen.	
No. 2 " Three-quarters Pint Food " "	5s. 0d. " "	.. .. 36s. " "	.. .. 30/- " "	Less
No. 3 " One Pint Food " "	6s. 0d. " "	.. .. 42s. " "	.. .. 33/- " "	5 per cent.
Clarke's Hot Water Lamps	2s. 6d. " "	.. .. 20s. " "	.. .. 18/- " "	for
" "Pyramid" Night Lamps	1s. 0d. " "	.. .. 8s. " "	.. .. 6/- " "	Cash.
" " " " Lights	.. ..	.. .. 7s. 6d. " "		

CAUTION.—The Patentee, in reply to numerous consumers, begs to state that he will warrant his PATENT "PYRAMID" FOOD WARMERS to answer the purpose for which they are recommended only when the "Pyramid" Night Lights are burned in them; the common night lights will not give sufficient heat. Persons who find a difficulty in obtaining the "Pyramid" Night Lights in good condition are requested to write to the Patentee, S. CLARKE, Patent "Pyramid" Night Light Works, Cricklewood, London, N.W., who will give the address of his nearest agent. The "Pyramid" Night Lights are best when newly made; the "Pyramid" Food Warmers are sold by all respectable dealers throughout the Kingdom, at 3s. 6d., 5s., and 6s. each.

N.B.—EXTRAS.—Porcelain Panakins, No. 1 8s. Lids 2s. per dozen.
No. 2 9s. " 3s. " "
No. 3 10s. " 4s. " "

Tin Panakins, No. 1, 8s. No. 2, 10s. No. 3, 12s. per dozen.
Clear Glasses, 4s. Roughed, 6s. Opaline, 6s.; Coloured, 6s. per doz.

PATENT "PYRAMID" NIGHT LIGHT WORKS, CRICKLEWOOD, LONDON, N.W.

N.B.—See that the Trade Mark, "PYRAMID," is on every Lamp and Light.

"KAMPHORKALK"

A fresh Disinfecting Powder. It is a combination of soluble Chlorides and Camphor.

THE ADVANTAGES CLAIMED FOR IT ARE—

It is free from Poison. It is free from Smell (except a slight odour of Camphor). It is Soluble in Water. It is White in Colour. It is not injurious to any fabrics. It is Effectual and Cheap.

EXTRACTS FROM REPORTS.

Professor WANKLYN says:—"It is a most powerful disinfectant."

Professor REDWOOD says:—"I have made several experiments for the purpose of testing the efficacy of 'Kamphorkalk' (Cooper's Camphorated Disinfectant), and am satisfied that it possesses the properties claimed for it, and that it may with advantage be used in cases where infective disease prevails; and for arresting the decay of animal or vegetable matter from which noxious effluvia may emanate."

Sold retail in pretty decorated Canisters, 2 lbs., 1/-; 6 lbs., 2/- each. In 28-lb. Kegs and 1-cwt. Casks much cheaper in proportion.

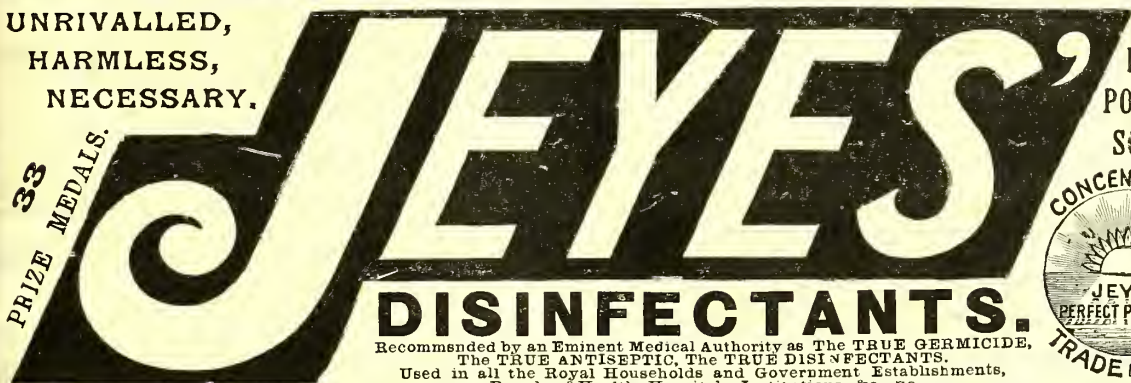
Special Wholesale Agents—Messrs. Sanger & Sons, 489 Oxford Street, London.

Proprietor and
Manufacturer—

ALFRED HORNBY, RICHMOND, SURREY.

UNRIVALLED,
HARMLESS,
NECESSARY.

33
PRIZE MEDALS.



LARGEST SALE OF ANY DISINFECTANTS.

Sold everywhere in Bottles & Tins at 6d. & 1s. each. Soaps from 4d. per pound. Wholesale only, 43 CANNON ST., LONDON, E.C.

HOPKINSON & CO.'S

NON-POISONOUS AND HARMLESS

SANITARY FLUID.

Half-an-ounce to a Gallon of Water makes the BEST, CHEAPEST, and SAFEST DISINFECTANT for Hospital, House, Yard, or Stable use.

Kills filth on all animals. Destroys insects on plants. Makes a splendid Sheep Dip. Has not a disagreeable smell.

A 6-ounce Bottle makes a good leading 1/ Disinfectant.

IN BARRELS (FREE) OF 40 GALLONS, PRICE 4/ PER GALLON, F.O.B.

HOPKINSON & CO., MANUFACTURING CHEMISTS, NOTTINGHAM.

CARBOLIC POWDER FROM £2 10s. TON

BEST QUALITIES CARBOLIC PINK POWDER,

5/-, 7/6, and 10/- per cwt., in bags or casks.

HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES

Size 7½ ins. by 3 ins. diameter, holding 1½ lbs. (usual 1/- size), 3/- dozen.

Ditto, LARGE SIZE, holding about double quantity, 4/6 dozen.

PALE CARBOLIC ACID, 99 per cent. strength (No. 5) and CHLORIDE OF LIME below market price.

BROWN CARBOLIC ACID (Crude), 9d., 1/-, and 1/6 Gallon.

DARK SANITARY FLUID (to be used with 80 parts of water, making a milky fluid), 2/- PER GAL.

10 PER CENT. DISCOUNT OFF LIST PRICES FOR CASH WITH ORDER.

All goods delivered free in London or suburbs, or to rail or docks. THE CHEAPEST HOUSE IN THE TRADE.

HAMILTON & CO., 118 HIGH ST., WANDSWORTH, LONDON, S.W.



ARMBRECHT'S COCA WINE.

AGENTS APPOINTED.
2 DUKE ST., GROSVENOR SQUARE.

ANALYTICAL AND CONSULTING CHEMIST. GEO. LOGAN RAIT, F.C.S., &c.

Laboratory—31 MOORGATE ST., LONDON, E.C.

Assistance given to Manufacturers and others requiring Chemical knowledge.

Fifty per cent. discount allowed to the Trade.

RUBBER TYPE



On Metal body, perfectly accurate, for instantly making a RUBBER STAMP for Special Labels, &c., saving expense and delay. Complete Outfits from 7.6. Send for Specimens and Price List to the Patentee, E. M. RICHFORD, Dept. 44 Snow Hill, London, C.

Manufacturer of Rubber Stamps, Presses, the "Nigropadd" and "Effective" Self-Inking Pads, &c., and Stamp-making Outfits.

Chemists in all parts of the world can add largely to their profits by pushing our Goods. Liberal terms.

A REQUISITE FOR EVERY CHEMIST. THOMPSON'S "EXCELSIOR" GELATINE PILL-COATING MACHINE.

See Chemist and Druggist Diary for 1887, page 246.

SMALL MACHINE TO COAT 96 PILLS EACH TIME, £3 3s.

For further particulars apply to

JAS. ROBERTSON & CO., 35 George Street, EDINBURGH.

London Agents—S. MAW, SON & THOMPSON.

Critchley's Starch Gloss

Makes Starched Linen like new. Does not stick to spider-like Materials. Once tried always wanted. Used in the Royal Laundries. Sold everywhere, in Packets, 1d., 3d., 6d., and 1s. each. Write for quotations.

Prepared only by
T. CRITCHLEY,
BLACKBURN, and
1 & 3 Australian Avenue,
LONDON, E.C.

"HOME, SWEET HOME."

QUIBELLS' INFALLIBLE DISINFECTANTS

AGENTS WANTED WHERE NOT ALREADY APPOINTED.

Write for Prices and Terms to

QUIBELL BROS., Manufacturing Chemists, Newark-on-Trent.

HONEY-DROP—FOR THE SKIN

Retail—6d., 10d., 1/6, and 3/-

This splendid preparation, which is selling immensely, can be had wholesale from

W. EDWARDS & SON, LONDON; EVANS, GADD & CO., EXETER

Special Terms for Agencies. Enquiries solicited.

Sole Proprietor and Manufacturer,

GEORGE STOCKER, CHEMIST, EXETER.

EMP. BELLADONNA.

ON SWANSDOWN, 16 IN. WIDE.

17s. per Doz. net cash.

JOHN QUILLIAM & CO., Plaster Works, Manchester.

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OFFICES FOR BRITISH AND FOREIGN

PATENTS AND TRADE MARKS,
SOMERSET CHAMBERS, 151 STRAND, LONDON
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Guide to New Patent Law and Registration gratis.

PURE CRUSHED LINSEED.

Contains all the Oil. The finest procurable.

Prepared from specially selected seeds.

Sold in 1 cwt. bags, 17s. per cwt., bags free; or in 28 and 56-lb. parcels 18s. per cwt.; also in 1/2 and 1 lb. tins and parchment packets.

IDRIS & CO.

MANUFACTURING CHEMISTS AND MINERAL WATER MAKERS,

ASCHAM STREET, LONDON, N.W.

NEW CURATIVE

TOOTHACHE PELLETS

(PATENTED AND REGISTERED).

Cure Toothache when everything else fails. Do not burn. Tubes containing Four Pellets are sold at 1s. 1 1/2d.

Wholesale on usual terms of Barclays, Newberys, Suttons, Sangers, Hovendens, London; John Thompson, Liverpool, &c.

N.B.—ARE INVALUABLE TO DENTISTS PRIOR TO STOPPING.

Proprietor, W. WILSON, 17 Devonshire Square, E.C.

PETROLEUM JELLY,

EQUAL TO AND CHEAPER THAN VASELINE.

SANITARY FLUID AND SHEEP DIP,
THE CHEAPEST AND BEST DISINFECTANT.

GREASE, PITCH, ASPHALTE, AND ALL PRODUCTS OF TAR AND ROSIN.

Samples and Prices on application.

GRINDLEY & CO., POPLAR, LONDON, E.

BENNETT & JENNER, STRATFORD, LONDON,

MANUFACTURERS OF

Hydrogen Peroxide, 10 to 20 Vol., Commercial and Pure;
Caramel (Burnt Sugar), Solid and Liquid; Sulphurous Acid;
Sulphites and Bisulphites; Iron Sulphate, Pure, and all Iron
Salts; Calcium Chloride, Pure, Cryst., and Fused.

IMPORTERS OF CARMINE AND PHOSPHORIC ACID

WILLOW

PAUL METZ,
2 NEW ZEALAND AVENUE,
LONDON, E.C.

Wholesale Buyers of these
goods should write to me for
samples and prices before
ordering elsewhere.

BOXES

PERFUMES, No. 30.

FIFTY KINDS.

9s. for 20 oz., Carriage Paid.

Samples of any kind for 2 stamps.

When buying, compare my Perfumes with other makers', and buy the best.

GEORGE DURRANT, HERTFORD.

London Agents—Messrs. BAISS BROS. & CO., Mr. WILLIAM TODGOOD

THE MANCHESTER MAKERS OF

METH. SPIRIT

Es:ablished
1840.

AND FINISH.

J. & D. MACNAIR & CO.,
29 Robert St., Manchester,
Bridgeton, GLASGOW.

IMPORTERS OF

Send for prices and samples.

SHELLAC, GUMS, ETC.

HOLBROOK'S WORCESTERSHIRE SAUCE

HOLBROOK'S LONDON RELISH

HOLBROOK'S PURE PICKLES

NOTICE.

THE BIRMINGHAM VINEGAR BREWERY COMPANY, LIMITED, the
Plaintiffs in the Action of THE BIRMINGHAM VINEGAR BREWERY
COMPANY, LIMITED, Plaintiffs,

and

THE LIVERPOOL VINEGAR COMPANY and Mr. DANIEL HOLBROOK,
Defendants,

Desire to draw the attention of the public and the trade to the Order made in this
Action, on Motion on the 11th June, 1888, by his Lordship Mr. Justice North. The
Order, after the usual prefatory words, was to the following effect :—

"This Court doth order that the Defendants, the Liverpool Vinegar Company and
William Daniel Holbrook and each of them, their and each of their servants, agents
and travellers, be restrained until judgment in the Action, or until further order, from
selling or allowing to be sold, or representing or causing or allowing to be repre-
sented, any goods manufactured by the Defendant Company as being the goods known
as 'Holbrook's Worcestershire Sauce,' 'Holbrook's London Relish,' and 'Holbrook's
'Pure Pickles,' and from representing or causing or procuring to be represented, or
doing anything which shall lead to the belief that the articles manufactured and sold
by the Defendant Company are the goods or manufacture of the Plaintiffs, or that
the Defendants are the Proprietors of the articles known by the aforesaid names."

The Birmingham Vinegar Brewery Company, Limited, will continue to use the
labels bearing the title of "Holbrook & Co." in connection with the above-mentioned
articles substantially in the form adopted by them since the incorporation of the Com-
pany. The Company will protect their right to the names above mentioned and to the
labels against any person or firm who may attempt to counterfeit them, or to manu-
facture or sell articles labelled or wrapped up in such a manner as to induce the public
to believe that they are the goods known as "**Holbrook's Worcestershire
Sauce,**" "**Holbrook's London Relish,**" or "**Holbrook's Pure
Pickles,**" which for so many years have been manufactured and sold by the

BIRMINGHAM VINEGAR BREWERY CO.

May be had on application, enclosing Business Card.

S. MAW, SON & THOMPSON'S



QUARTERLY

Price Current

AND



BOOK OF ILLUSTRATIONS

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SURGEONS' INSTRUMENTS & APPLIANCES

INSTRUMENTS, &c., FOR VETERINARY PURPOSES.

DRUGGISTS' APPARATUS, IMPLEMENTS, UTENSILS,

And other Requisites employed in Pharmacy and the Dispensing of Medicines.

MEDICAL GLASS AND EARTHENWARE.

LINT AND SPREAD PLASTERS.

SHOP FITTINGS, SHOW CASES.

HAIR, TOOTH, AND NAIL BRUSHES.

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FEEDING BOTTLES.


Proprietary Articles, Perfumery, and

DRUGGISTS' SUNDRIES OF ALL KINDS

MANUFACTURED AND SOLD BY

S. MAW, SON & THOMPSON, ALDERSGATE STREET, LONDON

FORWARDED POST FREE TO ALL PARTS OF THE WORLD.

 Chemists and Druggists not receiving the above who are desirous of doing so, are requested to make application enclosing Business Card, on receipt of which their names will be placed on the Register for all future issues.

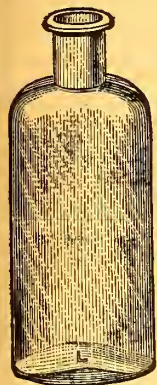


DISPENSING BOTTLES

PRIZE MEDAL.



SYDNEY, 1879.



QUININE TINTED. "L" BRAND.

Warranted Finest Quality Metal, Good
Mouths, and Correct Measure.



CATALOGUE No. 42a. In any quantity from Stock.

FLATS OR OVALS.

Size	...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross		9/-	9/6	10/-	10/6	10/6	11/6	11/6	16/-	17/-	21/-	25/-	27/6	36/-	40/-

Discount: 10 per cent. Monthly, 5 per cent. Half-yearly.

ALSO

IN ORIGINAL PACKAGES DIRECT FROM WORKS.

Carriage paid to Bristol, Glasgow, Liverpool, or London.

"L" BRAND. CATALOGUE No. 42a.

Size	...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross		7/6	8/-	8/-	8/6	8/6	9/6	9/6	12/6	13/6	16/6	20/-	22/-	29/-	33/-

BEST GREEN FLINT FLATS OR OVALS.

CATALOGUE No. 42.

Size	...	½ oz.	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross		6/-	6/-	6/-	6/-	6/8	6/8	7/9	7/9	10/6	11/6	15/-	19/-	22/-	27/6	32/-

STRICTLY NET CASH.

CASKS OR CRATES EXTRA.

LYNCH & CO., ALDERSGATE STREET, **LONDON, E.C.**
AND
48 QUEEN STREET, MELBOURNE.

SOLE IMPORTERS
OF
APOLLINARIS WATER,
FRIEDRICHSHALL WATER,
HUNYADI JÁNOS WATER,
THE APOLLINARIS CO., LIM.
19 REGENT STREET, LONDON, S.W.

SPECIAL PRICES ON APPLICATION.

CADBURY'S COCOA ESSENCE

The medical profession order Cadbury's Cocoa Essence in thousands of cases, as the most wholesome beverage. Be sure

you get it when asked for, as imitations are often pushed for the sake of extra profit.

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Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, JULY 21, 1888.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 14 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE, and crossed MARTIN & Co.

OFFICES: 42 CANNON ST., LONDON, E.C.

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3.—LONDON, N.E.—Main road; death vacancy; Retail and Family Business; returns average over £700; since death of proprietor have somewhat decreased; large attractive shop, fitted in mahogany; good house; price £550, or offer considered.

4.—LONDON, N.W.—Good suburb; very old-established well-fitted Dispensing and Retail Business; in same family for many years; turns £550 yearly; comfortable house, with private entrance; special reasons for sale; no reasonable offer refused.

5.—ESSEX.—Good country market town; Retail and Dispensing business; good opening for heavier trade to be added; returns at present nearly £400; good house, &c., attached; business is capable of great extension; price £225.

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5. DURHAM COUNTY ..	"	1,650.	"	75.	"	1,100
6. CHESHIRE	"	1,300.	"	55.	"	700
7. LEYTONSTONE...	"	240.	"	40.	"	225
8. LONDON, N.....	"	400.	"	45.	"	187
9. CLAPHAM.....	"	400.	"	40.	"	200
10. HAMMERSMITH ..	"	240.	"	40.	"	180
11. NOTTINGHAM ..	"	400.	"	25.	"	200
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ADVERTISER is open to purchase a Retail, Prescribing, and Dispensing Business in a good part of London, if a trial is allowed; will pay cash; must return not less than £500. Please send full particulars to J. S., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A GENUINE good-class Dispensing and Family Business, in or near London, S.E. or S.W.; must return not less than £500 or £600, and be capable of improvement; house must be either a corner one or have private entrance, and, at least, a small garden attached. Address, with full particulars and lowest price, to Tenax, care of Messrs. Baldock & Co., South Norwood, London, S.E.

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WANTED within a fortnight, Chemist and Druggist, Pharmaceutical Chemist, or L. S. A., with small capital (from £150 to £200), to start new business, under most favourable circumstances, the foundation being already laid and a moderate income secured from the first. Address, "Security," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SUBURBAN Chemist, seeing opening for small Branch, wants a good Minor man, not exalted in ideas, to take share in same, and have sole management; to decent fellow, with career to make on small capital, would be worth notice. "Pills," Tether, Sundryman, 39 Francis Place, Friar Street, S.E.

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MANCHESTER.—Populous working-class neighbourhood; leading thoroughfare; Dispensing and Light Retail; established 25 years; incoming about £150. For particulars, apply, G. H., Messrs. Bais Brothers & Co., New Brown Street, Manchester.

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£350.—A genuine steadily-increasing Retail and Prescribing Business in market town; mostly ready money; good house; large warehouse; good prices; satisfactory reasons for disposal; investigation allowed. Apply, X, 118 High Street, Oxford.

DUNDALK MEDICAL HALL for disposal as a going concern; established over 60 years; most imposing plate-glass front, modern fixtures and fittings; long lease; low rent; excellent opening for a steady man; terms easy; satisfactory reasons for disposal given. For particulars apply to Mulvany, Dundalk, Ireland.

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IMMEDIATE.—Bond-fide good-class Retail and Family Business in unopposed village within 15 miles of London; population 2,500; present bands 13 years; rent £35; net profit £250 per year guaranteed; price £575, value of stock and fittings only; no goodwill; open to offer. T. R., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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IMMEDIATELY.—Genuine ready-money Business for sale in the N.W. of London; corner position; returning £900; rent £50; at present let off £40, but can have whole house at once; to effect a speedy sale owner will accept £400. Address, "Traveller," 46 St. James' Grove, Peckham, London.

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KENT.—Old-established Retail, with valuable proprietary articles, having large sale in district, and capable of great extension; large town, centre of beautiful scenery; returns £850, have been much larger, and energetic man would soon materially increase them; price £700 including proprietaries, which are stocked by London wholesale houses). F. J. Brett, Valuer, 60 St. Stephen's Road, Leicester.

£1,550 RETURNS; price £700 or valuation; very old-established Retail, Agricultural, and Mineral Water trade, in pleasant Yorkshire town, centre of rich agricultural district; the vendor is retiring, and will give a very good introduction; part of purchase money can remain on security. F. J. Brett, Valuer, 60 St. Stephen's Road, Leicester.

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3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, an Assistant (indoors) accustomed to business in a good suburb. Apply, personally, at 1 P.M., Bell & Co, 100 Commercial Road, E.

AN ASSISTANT: Minor qualification; indoors; no Sunday duty; good at Prescribing and dressing window. D. P., 244 Westminster Bridge Road.

WANTED, a Junior; would suit an apprentice just out of his time accustomed to a mixed country trade; time for study allowed. Apply, Pertwee, Gray & Co., Romford, Essex.

AT once, Assistant, qualified, for Dispensing department, Haymarket Stores; outdoors; hours 9 to 7. Apply, by letter only, "The Chemist," tores, 23 Haymarket, S.W.

QUALIFIED Assistant wanted; outdoors; aged from 25 to 30 years; must be well up in dispensing, and a good prescriber; one accustomed to town trade preferred. Apply, personally if possible, to R. A. Gardner, 485 King's Road, Chelsea.

AT once, a Manager for Light Retail Branch; married; about 30; must be a good Dispenser, Prescriber, and Tooth Extractor; unfurnished house and gas provided (including gas for cooking). Apply, with references, stating salary expected, to "Chemists," 443 Hesse Road, Hull.

WANTED, at once, a Junior Assistant as Dispenser; also about the middle of August a competent Assistant for Retail counter; both indoors. Apply to J. K. Matterson, Co-operative Chemist, 94 New Oxford Street, W.C.

MITRE TEA.—Messrs. Kearley & Tonge, sole proprietors of the Mitre Tea, are prepared to negotiate in confidence with gentlemen having a business connection amongst good chemists. Apply by letter only, Kearley & Tonge, Tea Merchants, Mitre Square, Aldgate, E.O.

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TRAVELLERS wanted, with good connection amongst Chemists, Saddlers, Ironmongers, &c., for the Midland Counties and South Coast, also for the North and South of Ireland, for an old-established firm; unexceptionable references required. Apply, N. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.O.

MANCHESTER Royal Infirmary and Monsall Fever Hospital.—Junior Assistant Dispenser required at once; morning attendance at Infirmary, afternoon Monsall; Minor qualification; not over 30 years of age, and unmarried; salary £75 per annum; hours 8.30 to 6. Apply, by letter, to the General Superintendent

IMMEDIATELY. Assistant; accustomed to Ready-money, Retail, Dispensing, and Prescribing Business; must be obliging and trustworthy. Apply, personally (if possible), "Pharmacist," 137 Queen's Crescent, Haverstock Hill, N.W.

PORTER wanted; strong Youth aged 17 or 18 years; to live in, and would be occasionally required to help and serve in shop, under principal; state, by letter, age, salary, reference, and experience, stating what kind of work been used to, enclosing carte if convenient. R. Calvert, Chemist, Stokesley.

IMMEDIATELY.—Junior Assistant, indoors, in a Light Retail and Dispensing business; aged about 21 or 22; able to Dispense, Prescribe, and left occasionally in charge. Apply, stating salary, age, height, with reference (last employer), and when disengaged, enclosing photo, to John Lea, Folkestone.

HARROW Provident Fund.—Wanted, at once, a qualified Dispenser: hours of attendance—Mondays and Thursdays, 9.30 A.M. to 11.30 A.M., also on Wednesdays and Saturdays from 12 noon to 1 P.M., and every evening of the week (Sunday excepted) from 6 to 7; salary £70. State age and send written application, with testimonials, to Cuthbert Wills, Esq., Byron Hill, Harrow-on-the-Hill.

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1s. for twelve words; 6d. for every six words beyond.

MANAGER or Dispenser; Surgeon's or Chemist's; temporary or permanent. James Dunkerly, M.P.S., 88 Morton Road, Islington, N.

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IMPROVER in first-class business; aged 18; passed Prelim.; 18 months' experience. H. S., Rutland House, Fife, Yorks.

HUGH EDGSON, Junior, Wheeler Gate, Nottingham, requires situation as Junior; 4 years' experience; good references.

WHOLESALE; Wet or Dry counter; aged 30. Tedder, 319 Roman Road, Bow.

ASSISTANT, full or part time; London. Arthur, 30 Sydney Road, Brixton, S.W.

TEMPORARY or otherwise; qualified; aged 30; height 5 ft. 10 in.; good experience. Brook, 62 Church Street, South Shore, Blackpool.

OUTDOOR Assistant, or Dispenser to Surgeon; aged 24; good prescriber and tooth extractor. F. Orange, 53 Somers Road, Southsea.

JUNIOR or Improver; town or country; aged 19; extract teeth; good references. F. H., Mr. Routly, Chemist, Eastbourne.

LOCUM, or permanency; good Counterman and Prescriber; aged 37; abstainer; good references. "Cascara," 7 Manchester Road, Burnley.

DISPENSER to Surgeon or Chemist; qualified; whole or part time. L., 23 Third Avenue, Queen's Park, W.

AS Outdoor Assistant in Store Trade; aged 24; disengaged; excellent references. "Rad," Wright, Layman & Umncy, Southwark.

AS TRAVELLER and Bookkeeper; gentleman with town and country experience; aged 38. "Drugs," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.O.

ASSISTANT or Branch Manager; qualified; temporary, or permanent preferred; in or outdoor. Particulars to "Bet," Mr. Morgan, Chemist, Hereford.

MR. SMITH, 4 Lodge Street, Bristol, Registered Chemist, Manager during absence, illness, or branch previous to disposal; distance immaterial.

AUGUST.—As Manager of Branch (26); married; good prescriber and teeth extractor; good references. Gladman, Temperance Street, St. Albans, Herts.

ASSISTANT, Branch Manager, or Surgeon's Dispenser; good prescriber; 13 years' experience; married; unquestionable references; disengaged; moderate salary. W. M., 20 Prince's Street, Laundport, Hants.

EXPERIENCED MAN; Coast and Provinces; qualified; reliable; Assistant or Manager; competent dispenser; aged 27. "Chemist," Orpington, Kent.

MANAGER or Surgeon's Dispenser; qualified; 30 years' experience; married; good references. Apply, R. D., Messrs. Baiss Brothers & Co, Jewry Street, London, E.O.

WANTED, situation as a Junior Assistant to the Drug trade; just completed apprenticeship; good reference. Address, E. Groucott, Pillory Street, Nantwich, Cheshire.

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IMMEDIATE.—Assistant, aged 29; height 5 feet 7 inches; 12 years experience; permanency. J. Phillips, Field House, Manordale P.O., S. Wales.

LOCUM-TENENS.—A qualified chemist is prepared to accept engagements; country preferred; abstainer. Address, "Chemist," 148 St. Owen Street, Hereford.

AS ASSISTANT; good salesman and prescriber; aged 28; height 5 feet 10 inches; good references. S., 5 Lewis Villas, Carshalton Road, Sutton, Surrey.

MANAGER, Permanent or Temporary; qualified; good Prescriber and Dispenser; or as Traveller; good references; married. "Chemists," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLER; first-class connection amongst Stores and Chemists both in town and country; best references. Address, "X. L.," May's, 159 Piccadilly, London, W.

ALADY (registered Dentist), skilful and experienced, wishes to meet with a Chemist or medical gentleman who requires Dentistry introduced, or would give practical domestic duties for board and residence. Letters, S. T., 9A Rectory Road, Stoke Newington.

WHOLESALE Druggist.—Situation wanted; 16 years' experience, London and Provinces; could take management of Wet or Dry department if required. A., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLER, experienced, is open for one or two good Agencies amongst Chemists, Confectioners, Wholesale Drysalts, and Mineral Water Manufacturers. Address, "Lancashire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LOCUM-TENENS.—Mr. J. Hall Roberts, qualified Chemist (formerly of Harrow), is prepared to accept engagements on reasonable terms as above for ensuing season in town or country; a convinced abstainer from alcoholic beverages. Kindly enclose stamp for reply to Holbein House, Folkestone.

TRAVELLER.—Chemists, Wholesale Druggists, &c.—Advertiser, who has represented over the United Kingdom two of the best London houses for many years, is open to an immediate engagement, on part salary and part expenses or solely; knows every article in the trade, and does business with every good buyer. Address, "Traveller," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

APPRENTICESHIPS.

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APPRENTICE wanted, by Chemist in Bath; good opportunity for getting a general knowledge of the trade; premium £40; indoors. Apply, E. White, Kingsmead Square, Bath.

APPRENTICE.—In an old-established and first-class Business; comfortable home, and a healthy seaside town near London; premium moderate. Address, H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

FIFTY £1 Shares in the Hop Bitters Co., Limited; last two dividends 10 per cent. per annum; price 10s. 6d. each. Apply, by letter, Mr. Webb, 7 King William Street, E.C.

ADENTIST will allow to Chemists a good commission who will recommend him at his own address; will attend theirs by appointment or once a week. Write for cards and particulars, Phillips, 26 Lamb's Conduit Street, London, W.C.

BOXES.—Light Wood Boxes, cheapest, strongest, and best, suitable for packing all kinds of articles for transmission by post or rail; all sorts and sizes of boxes made to order; samples and price-lists, 4 stamps. Write for sample, stating size required, to T. Casbon, Millfield Box Works, Peterborough.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Cæsar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. MINOR.—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

OUR WEEKLY SUPPLEMENT.

We have prepared a set of forms for small advertisements (assistants wanted, businesses for disposal, Exchange column, &c.). With these are attached tables of useful reference matter (Sale of Poisons, Postal Information, Annual Licences, Metric Weights, Measures, Medicine Stamps, Law and Public Offices, &c.). We shall be glad to send one of these sets to any subscriber who will send us an addressed postal wrapper (bearing a halfpenny stamp). As the object of this production is to encourage the insertion of such advertisements as we have named in THE CHEMIST AND DRUGGIST, we hope this offer will be taken advantage of chiefly by those subscribers who are willing to use this journal whenever opportunities occur.